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## ABSTRACT

The Instructional Program Planning and Evaluation System (IPPEs) Master Objective Bank of the Jackson Public Schools, Michigan, provides a complete listing of the science instructional topics and objectives for kindergarten through the sixth grade. Each item is coded with a ten-digit numeral, which enables the user to categorize a given objective or to locate a given objective according to the following system: (1) the first two digits of the code indicate the subject matter area, classified under the headings of mathematics, reading and grammar, science, social studies, and writing skills and written expressions; (2) the third and fourth digits indicate the grade level; (3) the fifth, sixth, and seventh digits indicate the topic of the instructional unit covered by the objective, and these topics together with their assigned codes are listed on the Topic Summary Sheet; and (4) the eighth, ninth, and tenth digits indicate the objective within the topic, allowing for a maximum of one thousand objectives to be grouped under a single instructional unit topic. In this volume the objectives are primarily grouped according to grade level, with a secondary alphabetical ordering of topics under each grade level. This work was prepared under an ESEA Title III contract. (JR)

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# **I.P.P.E.S. MASTER OBJECTIVES SCIENCE (K-6) CATALOG**

**JACKSON PUBLIC SCHOOLS  
INSTRUCTIONAL PROGRAM  
PLANNING & EVALUATION SYSTEM**

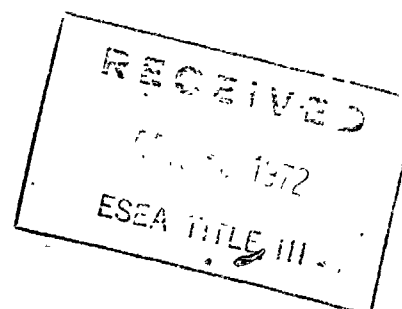
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JACKSON, MICHIGAN 49201**

**Funded under Title III, ESEA of 1965,  
Michigan Department of Education Project Number 0621**

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# MASTER OBJECTIVES BANK

## INSTRUCTIONAL PROGRAM PLANNING & EVALUATION SYSTEM (K-6) CATALOG



U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
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## ITEM CODE NUMBERS

Each item of the I.P.P.E.S. Master Objectives Bank is coded with a ten digit number which enables the user to categorize a given objective or to locate a needed objective according to a number.

1. Subject matter major classification. Initially IPES will provide objectives and grammar, (c) science, (d) social studies, and (e) writing skills and left to right) indicate subject matter:
  - (a) 00XXXXXXXX = mathematics
  - (b) 01XXXXXXXX = reading
  - (c) 02XXXXXXXX = science
  - (d) 03XXXXXXXX = social studies
  - (e) 04XXXXXXXX = writing
2. Grade Level. The grade level at which an objective is normally or traditionally taught is indicated by the first two digits of the code number. The first issue of the catalog is divided into grades K through grade six according to the following code:
  - (a) XX00XXXXXXXX = kindergarten
  - (b) XX01XXXXXXXX = first grade
  - (c) XX02XXXXXXXX = second grade
  - (d) XX03XXXXXXXX = third grade
  - (e) XX04XXXXXXXX = fourth grade
  - (f) XX05XXXXXXXX = fifth grade
  - (g) XX06XXXXXXXX = sixth grade
3. Topic of Instructional Unit: The fifth, sixth, and seventh digits indicate the objective. Each subject matter major classification may be divided into three topics. The three digit numerals assigned to topics specific to this catalog are found in the body of the catalog all objectives associated with a topic are grouped together and are associated with a seven digit number.

### ITEM CODE NUMBERS

ives Bank is coded with a ten digit numeral. The system chosen makes it easy for any  
e a needed objective according to a number of factors:

Initially IPPES will provide objectives in five areas: (a) mathematics, (b) reading  
studies, and (c) writing skills and written expression. The first two digits (from  
r:

cs

udies

h an objective is normally or traditionally introduced into the curriculum is coded  
he code number. The first issue of the catalogs covers the grade span from kindergarten  
llowing code:

ten

de

ade

de

ade

de

ade

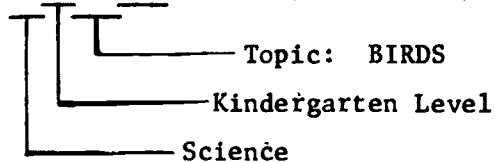
th, sixth, and seventh digits indicate the topic of the instructional unit covered by  
major classification may be divided into one thousand topics within each grade level.  
topics specific to this catalog are found on the following Topic Summary Sheet. Within  
as associated with a topic are grouped within grade levels. Topic headings are given  
number.

4. Objective Within Topic. A maximum of one thousand objectives may be grouped under one eighth, ninth, and tenth digits of the code number indicate the objective within the

#### SPECIFIC EXAMPLES OF CODING

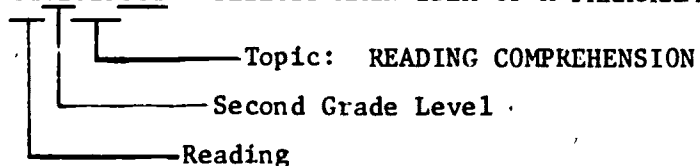
1. Science

0200060007 KNOW THE PARTS OF A CHICKEN EGG. (Seventh objective within topic)



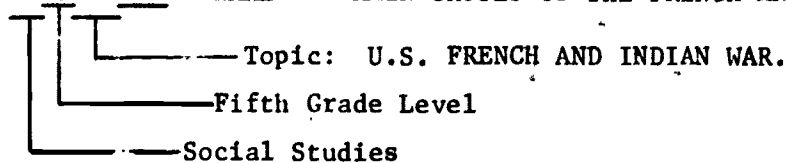
2. Reading

0102025001 SELECTS MAIN IDEA OF A PARAGRAPH. (First objective within topic)



3. Social Studies

0305295002 NAME THE MAIN CAUSES OF THE FRENCH AND INDIAN WAR. (Second objective within topic)



and objectives may be grouped under one Instructional Unit Topic. The number indicate the objective within the topic.

#### SPECIFIC EXAMPLES OF CODING

(Seventh objective within topic)

(First objective within topic)

THE AMERICAN INDIAN WAR. (Second objective within topic)

WAR.

SCIENCE TOPIC SUMMARY SHEET  
Grades K-6

<u>CODE</u>	<u>TOPIC</u>	<u>CODE</u>
005	Adaptation (animals)	180
010	Adaptation (behavior)	185
015	Adaptation (defense)	190
020	Adaptation (food)	195
025	Adaptation (habitat)	200
030	Adaptation (man)	205
035	Adaptation (plants)	210
040	Adaptation (plants and animals)	215
045	Air	220
050	Amphibians	225
055	Animals	230
060	Birds	235
065	Cells	240
070	Classification	245
075	Classify (animals)	250
080	Classify by five senses	255
085	Classify by kind, form, and properties	260
090	Classify (matter)	265
095	Classify (plants)	270
100	Classify (plant and animal)	275
105	Classify (plant and animal cells)	280
110	Cloth	285
115	Ecology	290
120	Electricity	295
125	Energy Transformation	300
130	Energy Transformation (air)	305
135	Energy Transformation (atoms)	310
140	Energy Transformation (burning candle)	315
145	Energy Transformation (carbon dioxide)	320
150	Energy Transformation (chemical)	325
155	Energy Transformation (combustion)	330
160	Energy Transformation (compounds)	335
165	Energy Transformation (compounds & mixtures)	340
170	Energy Transformation (condensation)	345
175	Energy Transformation (copper oxide)	350

SCIENCE TOPIC SUMMARY SHEET  
Grades K-6

<u>CODE</u>	<u>TOPIC</u>
180	Energy Transformation (decomposition)
185	Energy Transformation (electric)
190	Energy Transformation (elements)
195	Energy Transformation (evaporation)
200	Energy Transformation (food)
205	Energy Transformation (forms)
210	Energy Transformation (heat)
215	Energy Transformation (internal combustion)
220	Energy Transformation (kinetic)
225	Energy Transformation (light & sound)
230	Energy Transformation (liquid)
235	Energy Transformation (mass)
240	Energy Transformation (mixture)
245	Energy Transformation (molecular)
250	Energy Transformation (nuclear)
255	Energy Transformation (oxidation)
260	Energy Transformation (oxygen)
265	Energy Transformation (pressure)
270	Energy Transformation (solar)
275	Energy Transformation (substance)
280	Energy Transformation (volume)
285	Energy Transformation (water)
290	Erosion
295	Fish
300	Force and Motion
305	Fuels
310	Genetics
315	Geology
320	Human Body (behavior)
325	Human Body (circulatory)
330	Human Body (defense)
335	Human Body (diet)
340	Human Body (digestive)
345	Human Body (disease)
350	Human Body (ear)

**SCIENCE TOPIC SUMMARY SHEET (continued)**

<u>CODE</u>	<u>TOPIC</u>	<u>CODE</u>
355	Human Body (exercise)	530
360	Human Body (eye)	535
365	Human Body (growth)	540
370	Human Body (health conditions)	545
375	Human Body (health & safety)	550
380	Human Body (life activities)	555
385	Human Body (muscular)	560
390	Human Body (nervous)	565
395	Human Body (nose)	570
400	Human Body (posture)	575
405	Human Body (reflex)	580
410	Human Body (respiratory)	585
415	Human Body (skeletal)	590
420	Human Body (skin, hair, teeth, nails)	595
425	Human Body (systems)	600
430	Human Body (temperature)	605
435	Human Body (tongue)	
440	Human Body (water)	610
445	Insects	615
450	Interdependence	620
455	Light	625
460	Machines	630
465	Machines (complex)	635
470	Machines (simple)	640
475	Mammals	645
480	Magnets	650
485	Mealworms	655
490	Metals	660
495	Microorganisms	665
500	Microscope technique	670
505	Mollusks	675
510	Plants (adaptation)	680
515	Plants (bacteria)	685
520	Plants (bacteria & mold)	690
525	Plants (capillary action)	695
		700

<u>CODE</u>	<u>TOPIC</u>
530	Plants (fertilization)
535	Plants (food chains)
540	Plants (gases)
545	Plants (growth)
550	Plants (hybrids)
555	Plants (molds)
560	Plants (needs)
565	Plants (nongreen)
570	Plants (parts)
575	Plants (roots)
580	Plants (seeds)
585	Plants (trees)
590	Plants (water)
595	Pollution (water)
600	Pollution (water & air)
605	Relative positions of stationary & moving objects)
610	Reproduction
615	Reptiles (extinct)
620	Scientific Method
625	Soil
630	Solar system
635	Solar System (stars)
640	Sound
645	Systems (Interactions)
650	Systems & subsystems
655	Universe
660	Water
665	Weather
670	Weather (clouds)
675	Weather (fronts)
680	Weather (precipitation)
685	Weather (prediction)
690	Weather (recording)
695	Weather (storms)
700	Weather (temperature)

0200050

AMPHIBIANS

0200050001

KNOW THAT A TURTLE BEGAN ITS LIFE AS AN EGG, WHICH

HATCH

0200050002

DESCRIBE HOW A TURTLE BEGAN ITS LIFE AS AN EGG, WHICH

HATCH

0200050003

KNOW THE CHARACTERISTICS AND LIFE ACTIVITIES OF AQUATIC AND

0200050004

DESCRIBE THE CHARACTERISTICS AND LIFE ACTIVITIES OF  
EAT.

AQUATIC

0200060

BIRDS

0200060001

KNOW THAT A CHICKEN IS ONE KIND OF BIRD AND THAT ALL  
AND ARE COVERED WITH FEATHERS.

BIRDS

0200060002

DESCRIBE THAT A CHICKEN IS ONE KIND OF BIRD AND THAT ALL BIRDS  
EGGS AND THEY ARE COVERED WITH FEATHERS.

0200060003

KNOW THAT CHICKEN EGGS COME FROM THE HEN OR MOTHER  
INTO ADULTS.

CHICKENS

0200060004

DESCRIBE THAT CHICKEN EGGS COME FROM THE HEN OR MOTHER  
INTO ADULTS.

CHICKENS

0200060005

IDENTIFY PARTS OF THE EGG AS SHELL, MEMBRANE, WHITE AND YOLK

0200060006

DESCRIBE A CHICKEN EGG, BY BREAKING ONE OPEN AND

OBSERVE

0200060007

KNOW THE PARTS OF A CHICKEN EGG.

0200075

CLASSIFY (ANIMALS)

0200075001

KNOW THAT DIFFERENT ANIMALS CAN BE ORDERED BY  
AND AIR, MOVE, GROW, AND PRODUCE EGGS OR YOUNG.

CHARACTERISTICS

LIFE AS AN EGG, WHICH HATCHED INTO A SMALL TURTLE AND THEN GREW INTO AN ADULT.

ITS LIFE AS AN EGG, WHICH HATCHED INTO A SMALL TURTLE AND THEN GREW INTO AN ADULT.

LIFE ACTIVITIES OF AQUATIC AND LAND TURTLES.

AND LIFE ACTIVITIES OF AQUATIC AND LAND TURTLES, BY OBSERVING THEM MOVE AND

ND OF BIRD AND THAT ALL BIRDS ARE ALIKE IN TWO WAYS, ALL LAY HARD-SHELLED EGGS

E KIND OF BIRD AND THAT ALL BIRDS ARE ALIKE IN TWO WAYS, THEY ALL LAY HARD-SHELLED  
H FEATHERS.

FROM THE HEN OR MOTHER CHICKEN, AND THAT EGGS HATCH INTO BABY CHICKS WHICH GROW

ME FROM THE HEN OR MOTHER CHICKEN, AND THAT EGGS HATCH INTO BABY CHICKS WHICH GROW

SHELL, MEMBRANE, WHITE AND YOLK.

EAKING ONE OPEN AND OBSERVING IT.

EGG.

0200075002	ORDER VARIETY OF DIFFERENT ANIMALS INTO SETS AND SUBSETS ACCORDING HOW THEY GET FOOD AND AIR, MOVE, GROW, AND PRODUCE EGGS OR YOUNG.
0200080	CLASSIFY BY FIVE SENSES
0200080001	IDENTIFY THE SENSE OR SENSES USED IN EXAMINING A GIVEN OBJECT.
0200080002	KNOW THAT OBJECTS CAN BE IDENTIFIED BY SIZE, SHAPE, COLOR, TEXTURE, AND LIKENESSES.
0200080003	NAME A VARIETY OF OBJECTS, BY SIZE, SHAPE, COLOR, TEXTURE, AND LIKENESSES.
0200080004	IDENTIFY A VARIETY OF OBJECTS BY SIZE, SHAPE, COLOR, TEXTURE, AND LIKENESSES.
0200080005	KNOW THAT OBJECTS CAN BE ORDERED ACCORDING TO THEIR LIKENESSES.
0200080006	ORDER A VARIETY OF OBJECTS ACCORDING TO THEIR LIKENESSES AND DIFFERENCES.
0200080007	KNOW THAT OBJECTS CAN BE DISTINGUISHED ACCORDING TO COLORS.
0200080008	DISTINGUISH BETWEEN OBJECTS, ACCORDING TO THEIR COLORS.
0200080009	KNOW THAT OBJECTS CAN BE NAMED BY COLOR.
0200080010	KNOW THAT OBJECTS CAN BE IDENTIFIED BY COLORS.
0200080011	KNOW THAT OBJECTS CAN BE ORDERED BY COLORS.
0200080012	ORDER OBJECTS BY THEIR COLORS.

INTO SETS AND SUBSETS ACCORDING TO CHARACTERISTICS AND TO LIFE ACTIVITIES OF  
GROW, AND PRODUCE EGGS OR YOUNG.

IN EXAMINING A GIVEN OBJECT.

BY SIZE, SHAPE, COLOR, TEXTURE, AND MATERIAL.

SHAPE, COLOR, TEXTURE, AND MATERIAL.

SIZE, SHAPE, COLOR, TEXTURE, AND MATERIAL.

ACCORDING TO THEIR LIKENESSES AND DIFFERENCES.

ING TO THEIR LIKENESSES AND DIFFERENCES.

ISHED ACCORDING TO COLORS.

ING TO THEIR COLORS.

COLOR.

BY COLORS.

COLORS.

0200080013 CLASSIFY OBJECTS BY COLOR.

0200080014 NAME OBJECTS BY COLORS, AS RED, BLUE, YELLOW, AND GREEN.

0200080015 IDENTIFY OBJECTS BY COLORS, AS RED, BLUE, YELLOW, AND GREEN

0200080016 NAME THE PRIMARY COLORS.

0200080017 IDENTIFY THE SECONDARY COLOR RESULTING FROM THE COMBI

0200080018 CLASSIFY CIRCLES, TRIANGLES, SQUARES, AND RECTANGLES BY SHAPE

0200080019 KNOW THAT OBJECTS CAN BE IDENTIFIED BY THE SOUND THEY MAKE.

0200080020 KNOW THAT OBJECTS CAN BE DISTINGUISHED BY SIMILAR SOUND

0200080021 RECOGNIZE OBJECTS THAT MAKE SOUNDS THAT YOU CAN HEAR.

0200080022 IDENTIFY OBJECTS BY THE SOUND THEY MAKE.

0200080023 DESCRIBE OBJECTS BY THE SOUND THEY MAKE.

0200080024 DISTINGUISH BETWEEN OBJECTS THAT GIVE A SIMILAR SOUND.

0200080025 GIVEN ONE SOUND FOLLOWED BY ANOTHER SOUND, RECOGNIZE WHICH

0200080026 GIVEN ONE SOUND FOLLOWED BY ANOTHER SOUND, RECOGNIZE WHICH

BLUE, YELLOW, AND GREEN.

RED, BLUE, YELLOW, AND GREEN.

RESULTING FROM THE COMBINATION OF TWO PRIMARY COLORS.

SQUARES, AND RECTANGLES BY SHAPE.

DIFFERENTIATED BY THE SOUND THEY MAKE.

DIFFERENTIATED BY SIMILAR SOUNDS.

SOUNDS THAT YOU CAN HEAR.

THEY MAKE.

THEY MAKE.

WHAT GIVE A SIMILAR SOUND.

FOR EACH OTHER SOUND, RECOGNIZE WHICH SOUND IS LOUDER.

FOR EACH OTHER SOUND, RECOGNIZE WHICH SOUND IS MORE PLEASANT.

0200080027	CLASSIFY OBJECTS BY THE SOUNDS THEY MAKE.	
0200080028	KNOW THAT OBJECTS CAN BE DISTINGUISHED BY TEXTURE,	TOUCH,
0200080029	DISTINGUISH BETWEEN OBJECTS OF SIMILAR TEXTURE, BY	TOUCH A
0200080030	KNOW THAT TEXTURES CAN BE DESCRIBED BY TOUCH,	
0200080031	DESCRIBE THE TEXTURES OF A VARIETY OF OBJECTS BY	TOUCHIN
0200080032	AFTER TOUCHING AN OBJECT, DESCRIBE ITS TEXTURE.	
0200080033	RECOGNIZE A CIRCLE, A SQUARE, A TRIANGLE, AND A	RECTANG
0200080034	KNOW THAT OBJECTS CAN BE DISTINGUISHED BY THEIR WEIGHT.	
0200080035	IDENTIFY HEAVIER OF TWO OBJECTS WHEN THEY ARE PLACED	ONE IN
0200080036	KNOW THAT SUBSTANCES CAN BE IDENTIFIED BY ODOR AND	TASTE.
0200080037	DESCRIBE SUBSTANCES BY ODOR AND TASTE, WHILE	BLINDFO
0200080038	IDENTIFY SUBSTANCES BY ODOR AND TASTE, WHILE	BLINDFO
0200080039	GIVEN OBJECTS THAT LOOK ALIKE BUT SMELL OR TASTE DIFFERENT.	DIFFERE
0200080040	GIVEN VARIOUS FOODS TO TASTE, CLASSIFY THEIR TASTES AS	SALTY,

AKE.

D BY TEXTURE,

TOUCH, AND BY TASTE.

R TEXTURE, BY

TOUCH AND BY TASTE.

Y TOUCH.

OBJECTS BY

TOUCHING THEM, WHILE BLINDFOLDED.

S TEXTURE.

GLE, AND A

RECTANGLE BY USING THE SENSE OF TOUCH.

D BY THEIR WEIGHT.

THEY ARE PLACED

ONE IN EACH HAND.

D BY ODOR AND

TASTE.

, WHILE

BLINDFOLDED.

, WHILE

BLINDFOLDED.

ELL OR TASTE

DIFFERENT, RECOGNIZE WHETHER THEY SMELL OR TASTE

Y THEIR TASTES AS

SALTY, SOUR, SWEET, OR BITTER.

0200085	CLASSIFY BY KIND, FORM, AND PROPERTIES	
0200085001	KNOW THAT OBJECTS THAT HAVE SIMILAR SIZE, BUT DIFFER IN WEIGHT	WEIGHT
0200085002	KNOW THAT OBJECTS CAN BE DESCRIBED ACCORDING TO WEIGHT	ON A
0200085003	DESCRIBE SOME PROPERTIES OF A GIVEN OBJECT, (COLOR,	MAGNETIC
0200085004	DISTINGUISH BETWEEN TWO OBJECTS, ACCORDING TO THEIR	WEIGHT
0200085005	DESCRIBE OBJECTS ACCORDING TO THEIR WEIGHT ON A SCALE OR SPRING	SCALE
0200085006	DISTINGUISH BETWEEN OBJECTS THAT HAVE SIMILAR SIZE, BUT DIFFER	DIFFER
0200085007	KNOW THAT OBJECTS THAT WILL FLOAT AND NOT FLOAT CAN BE	DISTINGUISHED
0200085008	DISTINGUISH BETWEEN OBJECTS THAT WILL FLOAT AND NOT	FLOAT
0200085009	KNOW THAT A SCALE WORKS BY CAUSING THE INDICATOR TO	MOVE
0200085010	RECOGNIZE HEAVIER OF TWO OBJECTS WHEN THEY ARE PLACED	ONE
0200085011	DEMONSTRATE HOW A SCALE WORKS, BY WEIGHING OBJECTS,	CAUSING
0200085012	GIVEN STANDARD UNIT OF WEIGHT AND A SOLID OBJECT,	PREDICT
0200095	CLASSIFY (PLANTS)	
0200095001	KNOW THAT PLANTS ARE DIFFERENT, ALTHOUGH THEY HAVE	SIMILAR

SIMILAR SIZE, BUT DIFFER IN WEIGHT, CAN BE DISTINGUISHED BY USING A SCALE.

DESCRIBED ACCORDING TO WEIGHT ON A SCALE OR SPRING BALANCE.

FOR A GIVEN OBJECT. (COLOR, MAGNETISM, WEIGHT, MATERIAL, SHAPE, TEXTURE).

OBJECTS, ACCORDING TO THEIR WEIGHT.

MEASURE THEIR WEIGHT ON A SCALE OR SPRING BALANCE.

OBJECTS THAT HAVE SIMILAR SIZE, BUT DIFFER IN WEIGHT, BY USING A SCALE.

OBJECTS THAT FLOAT AND NOT FLOAT CAN BE DISTINGUISHED, BY PLACING THEM IN WATER.

OBJECTS THAT WILL FLOAT AND NOT FLOAT, BY PLACING THEM IN WATER.

USING THE INDICATOR TO MOVE FARTHER WITH HEAVIER OBJECTS.

OBJECTS WHEN THEY ARE PLACED ONE IN EACH PAN OF EQUAL-ARM BALANCE.

OBJECTS, BY WEIGHING OBJECTS, CAUSING THE INDICATOR TO MOVE FARTHER WITH HEAVIER

OBJECTS AND A SOLID OBJECT, PREDICT HOW MUCH OBJECT WOULD WEIGH IN STANDARD UNITS.

OBJECTS, ALTHOUGH THEY HAVE SIMILAR LIFE ACTIVITIES.

0200095002 DESCRIBE THAT PLANTS DIFFER, BY OBSERVING DIFFERENT PLANTS, AND CHARACTERISTICS, THOUGH SIMILAR LIFE ACTIVITIES.

0200295 FISH

0200295001 KNOW THAT A FISH BEGAN ITS LIFE AS AN EGG, WHICH HATCHED INTO A TINY

0200295002 DESCRIBE HOW A FISH BEGAN ITS LIFE AS AN EGG, WHICH HATCHED INTO ADULT.

0200295003 KNOW HOW A FISH MOVES, GETS AIR, AND EATS.

0200295004 DESCRIBE HOW A FISH MOVES, GETS AIR, AND EATS, BY OBSERVING A

0200295005 IDENTIFY THE PARTS OF THE FISH AS TAIL, FINS, GILLS, AND SCALES.

0200300 FORCE AND MOTION

0200300001 KNOW THAT PUSHES AND/OR PULLS ARE FORCES.

0200300002 DEMONSTRATE THAT A PUSH OR PULL IS NEEDED TO MAKE THINGS MOVE, BY MOV

0200300003 NAME PUSHES AND PULLS AS FORCES.

0200300004 KNOW THAT A FORCE IS NEEDED TO STOP AN OBJECT THAT IS MOVING.

0200300005 KNOW THAT A FORCE IS NEEDED TO CHANGE THE DIRECTION OF A MOTION.

0200300006 DEMONSTRATE THAT A FORCE IS NEEDED TO CHANGE THE DIRECTION OF OBSTACLES, CAUSING THEM TO BE DEFLECTED.

9, BY OBSERVING DIFFERENT PLANTS, AND BY DISCUSSING THAT THEY HAVE DIFFERENT  
MILAR LIFE ACTIVITIES.

LIFE AS AN EGG, WHICH HATCHED INTO A TINY FISH AND THEN GREW TO BECOME AN ADULT.

ITS LIFE AS AN EGG, WHICH HATCHED INTO A TINY FISH AND THEN GREW TO BECOME AN  
S AIR, AND EATS.

GETS AIR, AND EATS, BY OBSERVING A GOLDFISH IN AN AQUARIUM.

FISH AS TAIL, FINS, GILLS, AND SCALES.

LLS ARE FORCES.

PULL IS NEEDED TO MAKE THINGS MOVE, BY MOVING VARIOUS OBJECTS.

ORCES.

ED TO STOP AN OBJECT THAT IS MOVING.

D TO CHANGE THE DIRECTION OF A MOTION.

S ERIC D TO CHANGE THE DIRECTION OF A MOTION, BY ROLLING OBJECTS AGAINST  
LECTED.

0200300007	KNOW THAT A PUSH OR PULL IS NEEDED TO MAKE THINGS MOVE,	BY MO
0200300008	NAME THE FORCE THAT CAUSES FALLING THINGS TO FALL	TOWAR
0200300009	KNOW THAT THE FORCE THAT CAUSES FALLING THINGS TO FALL	TOWAR
0200300010	KNOW THAT AS THINGS ARE DROPPED THEY FALL TOWARD THE	EARTH
0200300011	DEMONSTRATE THAT AS THINGS ARE DROPPED THEY FALL TOWARD	THE E
0200300012	KNOW THAT GRAVITY MAKES THINGS GO FASTER AND FASTER.	
0200300013	DEMONSTRATE THAT GRAVITY MAKES THINGS GO FASTER, BY POINTS ON BOARD, OR BY RAISING AND LOWERING BOARD	ROLLI MARKI
0200300014	KNOW THAT THE PULL THAT CAUSES FALLING THINGS TO FALL	TOWAR
0200300015	DESCRIBE THE PULL THAT CAUSES FALLING THINGS TO FALL	TOWAR
0200300016	KNOW THAT IN ORDER TO LIFT AN OBJECT, THE NET FORCE MUST BE GR	
0200300017	DESCRIBE THAT A FORCE IS NEEDED TO STOP AN OBJECT THAT BEEN MOVED WILL COME TO A STOP.	IS MO
0200300018	KNOW THAT THE FORCE THAT STOPS MOVING OBJECTS IS	FRICT
0200300019	DEMONSTRATE THAT FRICTION STOPS ROLLING AND SLIDING BOARD CAUSING SLIDING OBJECTS TO STOP MORE QUICKLY.	OBJEC
0200300020	KNOW THAT FRICTION STOPS ROLLING AND SLIDING OBJECTS.	

NEEDED TO MAKE THINGS MOVE, BY MOVING VARIOUS OBJECTS.

FALLING THINGS TO FALL TOWARD THE EARTH AS GRAVITY.

SES FALLING THINGS TO FALL TOWARD THE EARTH IS GRAVITY.

PED THEY FALL TOWARD THE EARTH.

RE DROPPED THEY FALL TOWARD THE EARTH.

GS GO FASTER AND FASTER.

ES THINGS GO FASTER, BY ROLLING OBJECTS DOWN SMOOTH BOARD, STARTING AT DIFFERENT  
NG AND LOWERING BOARD MARKING WHERE OBJECTS STOP.

ES FALLING THINGS TO FALL TOWARD THE EARTH IS A FORCE.

S FALLING THINGS TO FALL TOWARD THE EARTH AS A FORCE.

N OBJECT, THE NET FORCE MUST BE GREATER THAN THE FORCE OF GRAVITY.

ED TO STOP AN OBJECT THAT IS MOVING, BY OBSERVING THAT ROLLING OBJECTS THAT HAVE  
OP.

S MOVING OBJECTS IS FRICTION.

PS ROLLING AND SLIDING OBJECTS, BY ROLLING AND SLIDING DIFFERENT OBJECTS DOWN A  
S TO STOP MORE QUICKLY,

ING AND SLIDING OBJECTS.

- 0200300021 NAME THE FORCE THAT STOPS MOVING OBJECTS AS FRICTION.
- 0200300022 DEMONSTRATE THE FUNCTION OF A LEVER AND FULCRUM, BY USING A SIMPL  
DIRECTION OF FORCE BEING USED BY HIM.
- 0200300023 KNOW THAT IT IS EASIER TO LIFT SOMETHING WITH A LEVER OR SEESAW WHEN T
- 0200300024 DEMONSTRATE THAT IT IS EASIER TO LIFT SOMETHING WITH A LEVER OR SEES
- 0200300025 DEMONSTRATE THAT LIFTING OBJECTS IS THE USING OF A FORCE IN THE DIRECT  
OBJECTS REQUIRE MORE FORCE TO LIFT THEM.
- 0200300026 KNOW THE FUNCTION OF A LEVER AND FULCRUM.
- 0200300027 KNOW THAT HEAVIER OBJECTS ARE THOSE THAT NEED MORE FORCE TO MOVE
- 0200300028 DESCRIBE HEAVIER OBJECTS AS THOSE THAT NEED MORE FORCE TO MOVE THEM.
- 0200300029 DESCRIBE THAT, IN ORDER TO LIFT AN OBJECT, THE NET FORCE MUST BE GREAT
- 0200380 HUMAN BODY (LIFE ACTIVITIES)
- 0200380001 KNOW THAT HUMAN LIFE ACTIVITIES ARE COMMON WITH ALL LIVING THINGS
- 0200380002 DESCRIBE HIS OWN LIFE ACTIVITIES, IN COMMON WITH ALL LIVING THINGS  
HIS OWN ACTIVITIES WITH OTHER LIVING THINGS STUDIED.
- 0200445 INSECTS
- 0200445001 KNOW THAT A MOTH IS ONE KIND OF INSECT, AND THAT ALL INSECTS HAVE  
SKELETON.

MOVING OBJECTS AS FRICTION.

OF A LEVER AND FULCRUM, BY USING A SIMPLE LEVER TO LIFT OBJECTS AND CHANGE THE  
USED BY HIM.

LIFT SOMETHING WITH A LEVER OR SEESAW WHEN THE LOAD IS ON THE SHORT END,

IER TO LIFT SOMETHING WITH A LEVER OR SEESAW WHEN THE LOAD IS ON THE SHORT END.

BJECTS IS THE USING OF A FORCE IN THE DIRECTION OPPOSITE TO GRAVITY, AND THAT HEAVIER  
TO LIFT THEM.

ER AND FULCRUM.

ARE THOSE THAT NEED MORE FORCE TO MOVE THEM.

S THOSE THAT NEED MORE FORCE TO MOVE THEM.

LIFT AN OBJECT, THE NET FORCE MUST BE GREATER THAN THE FORCE OF GRAVITY.

S)

ITIES ARE COMMON WITH ALL LIVING THINGS.

VITIES, IN COMMON WITH ALL LIVING THINGS, BY OBSERVING BABY PICTURES AND COMPARING  
HER LIVING THINGS STUDIED.

ND INSECT, AND THAT ALL INSECTS HAVE SIX LEGS, USUALLY WINGS, AND AN OUTSIDE

0200445002	DESCRIBE THAT A MOTH IS ONE KIND OF INSECT, AND THAT ALL INSECTS HAVE SKELETON.	
0200445003	KNOW THAT THE CATERPILLAR HATCHED FROM TINY EGGS	PRODUCED BY
0200445004	DESCRIBE HOW THE CATERPILLAR HATCHED FROM TINY EGGS	PRODUCED BY
0200445005	DESCRIBE THE LIFE CYCLE OF A MOTH, BY OBSERVING LIVE CHANGE INTO ADULTS.	CATERPILLAR
0200445006	KNOW THE LIFE CYCLE OF A MOTH.	

0200450	INTERDEPENDENCE	
0200450001	KNOW THE VARIETY OF PLANT AND ANIMAL MATERIALS IN THE	SAME ENVIRONMENT
0200450002	KNOW THAT PLANTS AND ANIMALS SHARE A COMMON ENVIRONMENT FROM WHICH GROW.	
0200450003	KNOW PLANT-ANIMAL RELATIONSHIPS AND THEIR	DEPENDENCE
0200450004	DESCRIBE HOW PLANTS AND ANIMALS SHARE A COMMON LIVE AND GROW.	ENVIRONMENT
0200450005	DEMONSTRATE THE VARIETY OF PLANT AND ANIMAL MATERIALS IN THE SAME ENVIRONMENT NEIGHBORHOOD AREA.	
0200450006	DESCRIBE PLANT-ANIMAL RELATIONSHIPS AND THEIR DEPENDENCE ON MAN, BY	

0200475	MAMMALS	
0200475001	KNOW THE CHARACTERISTICS AND LIFE ACTIVITIES OF MAMMALS.	

OF INSECT, AND THAT ALL INSECTS HAVE SIX LEGS, USUALLY WINGS, AND AN OUTSIDE

ED FROM TINY EGGS PRODUCED BY THE ADULT MOTH.

TCHED FROM TINY EGGS PRODUCED BY THE ADULT MOTH.

TH, BY OBSERVING LIVE CATERPILLARS AS THEY MOVE, FEED, SPIN COCOONS, AND

NIMAL MATERIALS IN THE SAME ENVIRONMENT.

ARE A COMMON ENVIRONMENT FROM WHICH THEY GET THE THINGS THEY NEED TO LIVE AND

AND THEIR DEPENDENCE ON MAN.

SHARE A COMMON ENVIRONMENT FROM WHICH THEY GET THE THINGS THEY NEED TO

T AND ANIMAL MATERIALS IN THE SAME ENVIRONMENT, BY COLLECTING MATERIALS FROM THE

SHIPS AND THEIR DEPENDENCE ON MAN, BY VISITING AND OBSERVING LIFE ON A FARM.

0200475002 KNOW THAT THE MOTHER MAMMAL HAS BABIES, WHICH SHE WILL TAKE CARE OF  
THEIR OWN TO BECOME ADULTS.

0200475003 DESCRIBE HOW THE MOTHER MAMMAL HAS BABIES, WHICH SHE WILL TAKE CARE  
ON THEIR OWN TO BECOME ADULTS.

0200475004 DESCRIBE THE CHARACTERISTICS AND LIFE ACTIVITIES OF MAMMALS, SUCH  
THEM MOVE, EAT, CONSTRUCT NESTS, AND RAISE YOUNG.

# 0200480 MAGNETS

0200480001 DEMONSTRATE THE PUSHING AND PULLING FORCE OF A MAGNET, BY USING A MA  
OBJECTS.

0200480002 KNOW THE PUSHING AND PULLING FORCE OF A MAGNET, BY USING A MAGNET

0200480003 KNOW THAT ONE BAR MAGNET EFFECTS ANOTHER BY CAUSING LIKE ENDS TO REPEL

0200480004 DEMONSTRATE THE EFFECT OF ONE BAR MAGNET UPON ANOTHER, BY CAUSING LI  
ATTRACT.

0200480005 KNOW THAT BAR MAGNETS ARE STRONGER ON THE ENDS THAN IN THE MIDDLE.

0200480006 DEMONSTRATE THAT BAR MAGNETS ARE STRONGER ON THE ENDS THAN IN THE M  
PLACES ON THE MAGNET.

0200480007 KNOW THAT SOME OBJECTS ARE AFFECTED BY THE MAGNET AND OTHERS ARE NO

0200480008 DISTINGUISH BETWEEN OBJECTS THAT CAN AND CANNOT BE MOVED BY THE MAGNET  
NOT AFFECTED BY THE MAGNET.

# 200505

## MOLLUSKS

200505001

KNOW THAT A SNAIL BEGAN ITS LIFE AS AN EGG, WHICH HATCHED INTO

BABIES, WHICH SHE WILL TAKE CARE OF FOR A WHILE UNTIL THE BABIES CAN GROW ON  
 S BABIES, WHICH SHE WILL TAKE CARE OF FOR A WHILE UNTIL THE BABIES CAN GROW  
 LIFE ACTIVITIES OF MAMMALS, SUCH AS WHITE RATS OR GUINEA PIGS, BY OBSERVING  
 AND RAISE YOUNG.

NG FORCE OF A MAGNET, BY USING A MAGNET TO LIFT AND MOVE VARIOUS METAL  
 E OF A MAGNET, BY USING A MAGNET TO LIFT AND MOVE VARIOUS METAL OBJECTS.

ANOTHER BY CAUSING LIKE ENDS TO REPEL AND UNLIKE ENDS TO ATTRACT,

MAGNET UPON ANOTHER, BY CAUSING LIKE ENDS TO REPEL AND UNLIKE ENDS TO

R ON THE ENDS THAN IN THE MIDDLE.

STRONGER ON THE ENDS THAN IN THE MIDDLE, BY LIFTING PAPER CLIPS AT DIFFERENT

ED BY THE MAGNET AND OTHERS ARE NOT.

CAN AND CANNOT BE MOVED BY THE MAGNET, BY USING VARIOUS KINDS OF OBJECTS, SOME

ERIC  
 AS AN EGG, WHICH HATCHED INTO A TINY SNAIL AND THEN GREW INTO AN ADULT.

0200505002 DESCRIBE THAT A SNAIL BEGAN ITS LIFE AS AN EGG, WHICH HATCH

0200505003 KNOW THE CHARACTERISTICS AND LIFE ACTIVITIES OF AQUATIC AND

0200505004 DESCRIBE THE CHARACTERISTICS AND LIFE ACTIVITIES OF AQUA  
EAT.

0200570 PLANTS (PARTS)

0200570001 KNOW THE PARTS OF A PLANT AS ROOT, STEM, LEAF, FLOWER, AND S

0200570002 IDENTIFY PARTS OF THE PLANT AS ROOT, STEM LEAF, FLOWER, AND S

0200580 PLANTS (SEEDS)

0200580001 KNOW THAT AN ASSORTMENT OF BEAN SEEDS CAN BE ORDERED ACCOR

0200580002 ORDER AN ASSORTMENT OF BEAN SEEDS ACCORDING TO THEIR LIKEN

0200580003 KNOW THAT BEAN SEEDS WILL SPROUT AND EXHIBIT DIFFERENCES IN TH

0200580004 KNOW DIFFERENT WAYS TO SPROUT SEEDS, BY PLACING SOME ON A MOI  
SOME IN SOIL, AND SOME IN WATER.

0200580005 DEMONSTRATE DIFFERENT WAYS TO SPROUT SEEDS, BY PLACING SOME  
GLASS, SOME IN SOIL, AND SOME IN WATER.

0200580006 DEMONSTRATE THAT BEAN SPEEDS WILL SPROUT AND EXHIBIT DIFFE  
OF SEEDS AND OBSERVING THEIR GROWTH.

0200580007 KNOW THAT WHEN SEEDS ARE PLANTED, THEY WILL SPROUT AND GROW

BEGAN ITS LIFE AS AN EGG, WHICH HATCHED INTO A TINY SNAIL AND THEN GREW INTO AN ADULT.

AND LIFE ACTIVITIES OF AQUATIC AND GARDEN SNAILS.

TICS AND LIFE ACTIVITIES OF AQUATIC AND GARDEN SNAILS, BY OBSERVING THEM MOVE AND

T AS ROOT, STEM, LEAF, FLOWER, AND SEED.

ANT AS ROOT, STEM LEAF, FLOWER, AND SEED.

OF BEAN SEEDS CAN BE ORDERED ACCORDING BY LIKENESSES OR DIFFERENCES.

BEAN SEEDS ACCORDING TO THEIR LIKENESSES OR DIFFERENCES.

L SPROUT AND EXHIBIT DIFFERENCES IN THEIR SPROUTS.

PROUT SEEDS, BY PLACING SOME ON A MOIST SPONGE, SOME BETWEEN BLC " LG PAPER AND GLASS, IN WATER.

YS TO SPROUT SEEDS, BY PLACING SOME ON A MOIST SPONGE, SOME BETWEEN BLOTING PAPER AND SOME IN WATER.

SEEDS WILL SPROUT AND EXHIBIT DIFFERENCES IN THEIR SPROUTS, BY PLANTING VARIOUS KINDS HERE GROWTH.

ERIC D, THEY WILL SPROUT AND GROW INTO THE SAME KIND OF PLANT FROM WHICH THEY CAME.

0200580008	DESCRIBE THAT WHEN SEEDS ARE PLANTED THEY WILL SPROUT AND GROW IN CAME.
0200580009	DESCRIBE A GROWING SEED PLANT BY OBSERVING A COMPLETE DANDELION P
0200585	PLANTS (TREES)
0200585001	KNOW THAT TREES HAVE SIMILARITIES WITH, AND DIFFERENCES FROM OTHER
0200585002	DESCRIBE THAT TREES HAVE SIMILARITIES WITH, AND DIFFERENCES OF SEEDS, FRUITS, AND OTHER TREE PARTS.
0200590	PLANTS (WATER)
0200590001	KNOW THAT SOME PLANTS GROW IN WATER.
0200590002	DESCRIBE THAT SOME PLANTS GROW IN WATER, BY OBSERVING AQUARIUM PL AND SIMILARITIES WITH, AND DIFFERENCES FROM, OTHER PLANTS.
0200590003	KNOW THAT SEAWEEDS DIFFER FROM OTHER PLANTS IN THAT THEY LACK ROOTS, SPECIAL PLANT CLASS (ALGAE).
0200590004	DESCRIBE THAT SEAWEEDS DIFFER FROM OTHER PLANTS IN THAT THAT THEY L BELONG TO A SPEICAL PLANT CLASS (ALGAE).
0200615	REPTILES (EXTINCT)
0200615001	KNOW THAT DINOSAURS ARE NO LONGER IN EXISTENCE, BUT ARE SIMILAR TO
0200615002	DESCRIBE DINOSAURS BY OBSERVING PICTURES OR MODELS AND DISCUSSING PRESENT DAY REPTILES.

NTED THEY WILL SPROUT AND GROW INTO THE SAME KIND OF PLANT FROM WHICH THEY  
OBSERVING A COMPLETE DANDELION PLANT, AND DISCUSSING PARTS OF THE PLANT,

S WITH, AND DIFFERENCES FROM OTHER PLANTS.

ITIES WITH, AND DIFFERENCES FROM OTHER PLANTS, BY OBSERVING A COLLECTION  
PARTS.

TER.

N WATER, BY OBSERVING AQUARIUM PLANTS AND BY DISCUSSING THE PARTS OF PLANTS  
RENCES FROM, OTHER PLANTS.

OTHER PLANTS IN THAT THEY LACK ROOTS, STEMS, LEAVES, AND FLOWERS, AND BELONG TO A

OM OTHER PLANTS IN THAT. THAT THEY LACK ROOTS, STEMS, LEAVES AND FLOWERS, AND  
(ALGAE).

R IN EXISTENCE, BUT ARE SIMILAR TO PRESENT DAY REPTILES.

PI S OR MODELS AND DISCUSSING THAT THEY NO LONGER EXIST, BUT ARE SIMILAR TO

**0201055      ANIMALS**

**0201055001      IDENTIFY THE FOLLOWING PROPERTIES OF ANIMALS: HOW THEY EAT.**

**0201055002      IDENTIFY THE FOLLOWING PROPERTIES OF ANIMALS: HOW THEY GROW.**

**0201055003      IDENTIFY THE FOLLOWING PROPERTIES OF ANIMALS: HOW THEY CHANGE.**

**0201055004      IDENTIFY THE FOLLOWING PROPERTIES OF ANIMALS: HOW THEY MOVE BY**

**0201055005      IDENTIFY THE FOLLOWING PROPERTIES OF ANIMALS: HOW THEY REPRODUCE.**

**0201055006      KEEP AN ACCURATE RECORD OF GROWTH CHANGES OF AN ANIMAL YOU HAVE.**

**0201055007      KNOW THAT ANIMALS MAY BE PRESERVED IN ICE FOR LONG PERIODS.**

**0201055008      DEMONSTRATE THAT ANIMALS MAY BE PRESERVED IN ICE, BY PLACING  
THEN ADDING WATER TO ENCLOSE THE DEAD INSECT WITHIN ICE.**

**0201055009      DESCRIBE THAT ANIMALS MAY BE PRESERVED IN ICE FOR LONG PERIODS  
REMAIN OVER A LONG PERIOD OF TIME.**

**0201075      CLASSIFY (ANIMALS)**

**0201075001      LIST BASIC CHARACTERISTIC OF EACH ANIMAL GROUP.**

**0201075002      CLASSIFY ANIMALS ACCORDING TO HABITATS, SKIN COVERING, THE WAY**

**0201075003      GIVEN A LIST OF PICTURES OF 30 DIFFERENT ANIMALS CLASSIFY**

PROPERTIES OF ANIMALS: HOW THEY EAT.

PROPERTIES OF ANIMALS: HOW THEY GROW.

PROPERTIES OF ANIMALS: HOW THEY CHANGE.

PROPERTIES OF ANIMALS: HOW THEY MOVE BY THEMSELVES.

PROPERTIES OF ANIMALS: HOW THEY REPRODUCE.

GROWTH CHANGES OF AN ANIMAL YOU HAVE OBSERVED.

PRESERVED IN ICE FOR LONG PERIODS.

HOW TO BE PRESERVED IN ICE, BY PLACING A DEAD INSECT IN WATER, LETTING IT FREEZE,  
AND THE DEAD INSECT WITHIN ICE.

HOW TO BE PRESERVED IN ICE FOR LONG PERIODS, BY OBSERVING THAT THE INSECT FROZEN IN ICE WILL  
LAST FOR A LONG TIME.

FOR EACH ANIMAL GROUP.

TO HABITATS, SKIN COVERING, THE WAY THE ANIMAL MOVES, AND/OR THE NUMBER OF LEGS,

30 DIFFERENT ANIMALS CLASSIFY THEM IN CORRECT ANIMAL GROUP.

0201080 CLASSIFY BY FIVE SENSES .

0201080001 NAME THE PRIMARY COLORS.

0201080002 RECOGNIZE OBJECTS THAT ARE THE PRIMARY COLORS.

0201080003 IDENTIFY THE SECONDARY COLOR RESULTING FROM THE COMBINATION

0201080004 CLASSIFY OBJECT BY COLOR.

0201080005 CLASSIFY BIRCH, WALNUT, AND OAK WOODS BY KIND.

0201080006 IDENTIFY OBJECTS MADE OF MORE THAN ONE MATERIAL.

0201080007 DESCRIBE SOME PROPERTIES OF A GIVEN METAL.

0201080008 CLASSIFY OBJECTS BY TEXTURE.

0201080009 RECOGNIZE THE ROCK AND POWDER FORMS OF A GIVEN KIND OF ROCK.

0201080010 CLASSIFY ROCKS BY SIZE, COLOR, KIND, HARDNESS, AND WEIGHT.

0201080011 RECOGNIZE A CIRCLE, A SQUARE, A TRIANGLE, AND A RECTANGLE BY

0201080012 CLASSIFY CIRCLES, TRIANGLES, SQUARES, AND RECTANGLES BY SHAPE.

0201080013 DESCRIBE THE SHAPE AND TEXTURE OF UNSEEN OBJECTS BY USING THE SE

0201080014 AFTER TOUCHING AN OBJECT, DESCRIBE ITS TEXTURE.

Y COLORS.

G FROM THE COMBINATION OF TWO PRIMARY COLORS.

BY KIND.

E MATERIAL.

ETAL.

F A GIVEN KIND OF ROCK.

HARDNESS, AND WEIGHT.

GLE, AND A RECTANGLE BY USING THE SENSE OF TOUCH.

AND RECTANGLES BY SHAPE.

TEEN OBJECTS BY USING THE SENSE OF TOUCH.

S TEXTURE.

0201080015	GIVEN VARIOUS FOODS TO TASTE, CLASSIFY THEIR TASTES AS	SAL
0201080016	GIVEN OBJECTS THAT LOOK ALIKE BUT SMELL OR TASTE- DIFFERENT.	DIF
0201080017	IDENTIFY THE SENSE OR SENSES USED IN EXAMINING A GIVEN	OB.
0201080018	DESCRIBE THE PROPERTIES OF A GIVEN OBJECT.	
0201080019	DESCRIBE THE TEXTURE, SIZE, COLOR, SHAPE, AND	REF
0201080020	CLASSIFY WOOD, METAL, AND PLASTIC OBJECTS BY MATERIAL.	
0201080021	CLASSIFY OBJECTS BY SIZE. (USE ONLY THE SENSE OF	TOU
0201080022	CLASSIFY OBJECTS BY TEMPERATURE USING THE SENSE OF	TOU
0201080023	CLASSIFY GIVEN OBJECTS BY SMELL.	
0201080024	CLASSIFY GIVEN OBJECTS BY TASTE.	
0201080025	RECOGNIZE THE CHIPS, SAWDUST, AND SHAVINGS OF A GIVEN	KIN
0201080026	CLASSIFY STEEL, LEAD, BRASE, AND ALUMINUM OBJECTS PY	KIN
0201080027	CLASSIFY LIQUIDS BY DENSITY AND OPAQUENESS.	
0201080028	IDENTIFY THE LIQUID AND ICE FORMS OF WATER.	

SIFY THEIR TASTES AS SALTY, SOUR, SWEET, OR BITTER.

SMELL OR TASTE DIFFERENT, RECOGNIZE WHETHER THEY SMELL OR TASTE

IN EXAMINING A GIVEN OBJECT.

OBJECT.

SHAPE, AND REFLECTANCE OF A GIVEN OBJECT.

OBJECTS BY MATERIAL.

LY THE SENSE OF TOUCH).

ING THE SENSE OF TOUCH. (WARM, HOT, COLD).

SHAVINGS OF A GIVEN KIND OF WOOD.

ALUMINUM OBJECTS BY KIND.

PAQUENESS.

OF WATER.

0201080029	WHEN GIVEN AN OBJECT, EXAMINE AND DESCRIBE ORALLY THE CRITERIA: SHAPE, COLOR, TEXTURE.	OBJE
0201080030	GIVEN A LIST OF TWENTY-FIVE DESCRIPTIVE ADJECTIVES AND A TEXTURE), MATCH AT LEAST FIVE OF THE ADJECTIVES WITH	LIST EACH
0201080031	CLASSIFY A GROUP OF OBJECTS IN MORE THAN ONE WAY,	(TEX
0201085	CLASSIFY BY KIND, FORM, AND PROPERTIES	
0201085001	IDENTIFY THE EVIDENCE OF AIR AS AN OBJECT.	
0201085002	TELL AFTER OBSERVATION WHETHER A GIVEN OBJECT FLOATS OR	SINK
0201085003	CLASSIFY OBJECTS BY TEMPERATURE USING A THERMOMETER.	
0201085004	CLASSIFY OBJECTS BY WEIGHT.	
0201115	ECOLOGY	
0201115001	AFTER VIEWING A PICTURE SHOWING AREA OF NATURAL CONSERVATION PRACTICES.	RESO
0201195	ENERGY TRANSFORMATION (EVAPORATION)	
0201195001	KNOW THAT HEAT FROM THE SUN HELPS TO CHANGE WATER TO	WATE
0201195002	DEMONSTRATE EVAPORATION, BY PLACING DROPS OF WATER INTO ONE DAY.	AN O

AND DESCRIBE ORALLY THE OBJECT IN TERMS OF AT LEAST THREE OF THE FOLLOWING  
TURE.

DESCRIPTIVE ADJECTIVES AND A LIST OF FOUR SCIENTIFIC PROPERTIES (SHAPE, COLOR, ODOR,  
OF THE ADJECTIVES WITH EACH SCIENTIFIC PROPERTY,

IN MORE THAN ONE WAY, (TEXTURE, SIZE, COLOR, SHAPE, REFLECTANCE).

PROPERTIES

AS AN OBJECT.

OR A GIVEN OBJECT FLOATS OR SINKS IN WATER.

ORE USING A THERMOMETER.

ING AREA OF NATURAL

RESOURCES WASTED OR DESTROYED, LIST FOUR POOR

RATION)

HELPS TO CHANGE WATER TO

WATER VAPOR WHICH GOES INTO THE AIR.

PL DROPS OF WATER INTO AN OPEN GLASS AND OBSERVING THE CHANGE IN QUANTITY AFTER

0201195003 DEMONSTRATE THAT HEAT FROM THE SUN HELPS TO CHANGE WATER TO WATER  
GLASS OF WATER IN SUNLIGHT AND AN EQUAL GLASS OF WATER IN A DARK

0201300 FORCE AND MOTION

0201300001 KNOW THAT THE UPWARD PUSH OF A RELEASED BALLOON IS CAUSED BY

0201300002 DEMONSTRATE A MODEL OF A ROCKET BY BLOWING UP A BALLOON AND LETTING

0201300003 DESCRIBE THAT THE UPWARD PUSH IS CAUSED BY THE AIR RUSHING DOWN

0201300004 DEMONSTRATE FRICTION BY PULLING A ROLLER SKATE WITH A RUBBER BAND  
WHEN THE SKATE IS DRAGGED ON ITS SIDE THAN WHEN IT IS PULLED

0201350 HUMAN BODY (EAR)

0201350001 IDENTIFY THE FUNCTION OF THE EAR.

0201360 HUMAN BODY (EYE)

0201360001 IDENTIFY THE FUNCTION OF THE EYE.

0201395 HUMAN BODY (NOSE)

0201395001 IDENTIFY THE FUNCTION OF THE NOSE.

THE SUN HELPS TO CHANGE WATER TO WATER VAPOR WHICH GOES INTO THE AIR, BY PLACING ONE AND AN EQUAL GLASS OF WATER IN A DARK OR SHADED PLACE.

OF A RELEASED BALLOON IS CAUSED BY THE DOWNWARD RUSH OF AIR FROM THE BALLOON.

CKET BY BLOWING UP A BALLOON AND LETTING IT GO, CAUSING THE BALLOON TO MOVE.

SH IS CAUSED BY THE AIR RUSHING DOWN WARD FROM THE BALLOON.

LING A ROLLER SKATE WITH A RUBBER BAND, CAUSING THE RUBBER BAND TO STRETCH MORE  
N ITS SIDE THAN WHEN IT IS IS PULLED ON ITS WHEELS.

E EAR,

E EYE,

E NOSE,

0201435 HUMAN BODY (TONGUE)

0201435001 IDENTIFY THE FUNCTIONS OF THE TONGUE.

0201470 MACHINES (SIMPLE)

0201470001 CHOOSE FIVE MACHINES FROM GROUP OF FIFTEEN OBJECTS.

0201470002 WITH SIMPLE MACHINE, GIVE DEMONSTRATION. SHOW HOW TASK CAN BE

0201470003 LEARN SIX SIMPLE MACHINES. IDENTIFY BY LISTING FOUR IN SCHOOL

0201470004 USING SIMPLE MATERIALS (SPOOLS, ROPE), MAKE A PULLEY SYSTEM

0201480 MAGNETS

0201480001 KNOW THAT A MAGNETIC FORCE CAN BE USED TO OVERCOME THE "FORCE OF

0201480002 DEMONSTRATE THAT A MAGNETIC FORCE CAN BE USED TO OVERCOM  
SOME OBJECTS.

0201480003 KNOW THAT A MAGNET CAN BE USED TO PICK UP SOME METAL OBJECTS  
OBJECTS.

0201480004 DEMONSTRATE THAT A MAGNET CAN BE USED TO PICK UP SOME METAL O  
NON-METAL OBJECTS.

0201480005 KNOW THAT OBJECTS CAN BE ORDERED INTO TWO GROUPS THOSE THAT CA

0201480006 ORDER OBJECTS INTO TWO GROUPS, THOSE THAT CAN BE PICKED UP BY A

E TONGUE.

GROUP OF FIFTEEN OBJECTS.

DEMONSTRATION. SHOW HOW TASK CAN BE MADE EASIER WITH MACHINE.

IDENTIFY BY LISTING FOUR IN SCHOOL ENVIRONMENT.

(S, ROPE), MAKE A PULLEY SYSTEM WHICH WORK.

CAN BE USED TO OVERCOME THE FORCE OF GRAVITY.

FORCE CAN BE USED TO OVERCOME THE FORCE OF GRAVITY, BY USING A MAGNET TO LIFT

ED TO PICK UP SOME METAL OBJECTS FROM AN ARRAY OF DIFFERENT METAL AND NON-METAL

N BE USED TO PICK UP SOME METAL OBJECTS FROM AN ARRAY OF DIFFERENT METAL AND

ERED INTO TWO GROUPS THOSE THAT CAN BE PICKED UP BY A MAGNET AND THOSE THAT CANNOT.

S, THOSE THAT CAN BE PICKED UP BY A MAGNET AND THOSE THAT CANNOT.

0201545

PLANTS (GROWTH)

0201545001

KEEP AN ACCURATE RECORD OF THE CHANGING PROPERTIES OF A GROWING

0201545002

DESCRIBE THE CHANGE OF PROPERTIES IN A GROWING PLANT.

0201555

PLANTS (MOLDS)

0201555001

KNOW THAT MOLD PLANTS MAKE MORE MOLD PLANTS.

0201555002

DEMONSTRATE THAT MOLD PLANTS MAKE MORE MOLD PLANTS BY PLACING  
DARK, WARM PLACE.

0201560

PLANTS (NEEDS)

0201560001

PREPARE AN EXPERIMENT IN WHICH YOU TRY TO GROW SIMILAR SEEDS

0201560002

KNOW THAT WATER IS ESSENTIAL FOR SURVIVAL OF LIVING PLANTS

0201560003

DEMONSTRATE THAT WATER IS ESSENTIAL FOR SURVIVAL OF LIVING  
SOME WITH SUFFICIENT WATER, AND SOME WITH INSUFFICIENT WATER.

0201560004

KNOW THAT GREEN PLANTS NEED SUNLIGHT.

0201560005

DEMONSTRATE THAT GREEN PLANTS NEED SUNLIGHT, BY SPROUTING  
IN THE DARK TO BE PALE AND WEAK.

0201570

PLANTS (PARTS)

0201570001

DESCRIBE THE PROPERTIES OF A PLANT OR PART OF A PLANT.

CHANGING PROPERTIES OF A GROWING PLANT.

ES IN A GROWING PLANT.

E MOLD PLANTS.

MAKE MORE MOLD PLANTS BY PLACING A PIECE OF MOLDY FOOD NEAR NON-MOLDY FOODS IN A

YOU TRY TO GROW SIMILS SEEDS UNDER TWO OR MORE DIFFERENT SOIL CONDITIONS.

OR SURVIVAL OF LIVING PLANTS.

NTIAL FOR SURVIVAL OF LIVING PLANTS, BY PLANTING BEAN SEEDS IN SOIL, WATERING  
D SOME WITH INSUFFICIENT WATER.

NLIGHT.

NEED SUNLIGHT, BY SPROUTING POTATO EYES IN LIGHT AND DARK, CAUSING THOSE  
K.

LANT OR PART OF A PLANT.

0201580 PLANTS (SEEDS)

0201580001 GIVEN SOME SEEDS, GROW A PLANT.

0201580002 KNOW THAT A NEW PLANT SPROUTS FROM A DRIED LIMA BEAN, WHEN IT H  
SEVERAL DAYS.

0201580003 OBSERVE DEVELOPMENT OF SEED. DRAW DIAGRAMS AND CONSTRUCT  
DEVELOPMENTAL STAGES OF GROWTH FOR PLANTS.

0201580004 DEMONSTRATE THAT A NEW PLANT SPROUTS FROM A DRIED LIMA BEAN WHEN  
SEVERAL DAYS.

0201580005 PREPARE EXPERIMENT IN WHICH YOU TRY TO GROW SIMILIAR SEEDS UND

0201620 SCIENTIFIC METHOD

0201620001 WITH SERIES OF EXPERIENCES RELATING TO OBSERVATION AND INFERENCE  
SITUATION.

0201630 SOLAR SYSTEM

0201630001 DEMONSTRATE THE SUN-MOON-EARTH LIGHT RELATIONSHIP, BY SHINING A  
CAUSING IT TO REFLECT ONTO AN EARTH GLOBE.

0201640 SOUND

0201640001 RECOGNIZE OBJECTS THAT MAKE SOUNDS THAT YOU CAN HEAR.

0201640002 GIVEN ONE SOUND FOLLOWED BY ANOTHER SOUND, RECOGNIZE WHICH SOUN

0201640003 GIVEN ONE SOUND FOLLOWED BY ANOTHER SOUND, RECOGNIZE WHICH SOUN

FROM A DRIED LIMA BEAN, WHEN IT HAS BEEN SOAKED IN WATER AND KEPT MOIST FOR  
DRAW DIAGRAMS AND CONSTRUCT VIEWER TO OBSERVE GERMINATION AND  
FOR PLANTS.  
ROOTS FROM A DRIED LIMA BEAN WHEN IT HAS BEEN SOAKED IN WATER AND KEPT MOIST FOR  
TRY TO GROW SIMILIAR SEEDS UNDER TWO OR MORE DIFFERENT SOIL CONDITIONS.  
TING TO OBSERVATION AND INFERENCES MAKE OBSERVATION AND INFERENCE ABOUT A  
LIGHT RELATIONSHIP, BY SHINING A FLASHLIGHT BEAM AGAINST WHITE PAPER AND  
ARTH GLOBE.  
NDS THAT YOU CAN HEAR.  
OTHER SOUND, RECOGNIZE WHICH SOUND IS LOUDER.  
OTHER SOUND, RECOGNIZE WHICH SOUND HAS HIGHER PITCH.

0201640004 GIVEN ONE SOUND FOLLOWED BY ANOTHER SOUND, RECOGNIZE WHICH

0201640005 CLASSIFY OBJECTS BY THE SOUNDS THEY MAKE.

0201650 SYSTEMS AND SUBSYSTEMS

0201650001 KEEP AN ACCURATE RECORD OF OBJECTS BELONGING TO A SYSTEM

0201650002 CLASSIFY OBJECTS AND MATERIALS INTO SYSTEMS AND SUBSYS

0201700 WEATHER (TEMPERATURE)

0201700001 KNOW THAT CHANGES IN TEMPERATURE CAN BE DISTINGUISHED BY USING

0201700002 DISTINGUISH BETWEEN CHANGES IN TEMPERATURE, AS INDICATED ON A T  
UPWARD IN A WARMER ENVIRONMENT AND DOWNWARD IN A COLDER ENVIRO

0201700003 READ THERMOMETER CORRECTLY 10 OUT OF 12 TIMES.

BY ANOTHER SOUND, RECOGNIZE WHICH SOUND IS MORE PLEASANT.

SOUNDS THEY MAKE.

OF OBJECTS BELONGING TO A SYSTEM.

ERIALS INTO SYSTEMS AND SUBSYSTEMS.

PERATURE CAN BE DISTINGUISHED BY USING A THERMOMETER.

GES IN TEMPERATURE, AS INDICATED ON A THERMOMETER, BY OBSERVING THERMOMETER COLUMN MOVE  
ONMENT AND DOWNWARD IN A COLDER ENVIRONMENT.

Y 10 OUT OF 12 TIMES.

0202070	CLASSIFICATION	
0202070001	CLASSIFY GIVEN OBJECTS.	
0202070002	DESCRIBE THE PROPERTIES OF A GIVEN OBJECT.	
0202075	CLASSIFY (ANIMALS)	
0202075001	CLASSIFY FAMILIAR ANIMALS ACCORDING TO WHETHER THEY EAT MEAT, PLANT	
0202075002	AFTER STUDYING DIFFERENT CLASSIFICATION SCHEMES, WRITE AT LEAST CHARACTERISTICS ARE MOST IMPORTANT IN CLASSIFYING ANIMALS.	
0202090	CLASSIFY (MATTER)	
0202090001	GIVEN THE NAME OF 20 DIFFERENT MATERIALS USED IN OUR DAILY LIFE PHYSICAL PROPERTIES AS LIQUID, GAS, OR SOLID.	
0202120	ELECTRICITY	
0202120001	KNOW HOW TO CONSTRUCT A CIRCUIT, USING A DRY CELL, WIRES, AND	
0202120002	IDENTIFY OPEN AND CLOSED CIRCUITS.	
0202120003	PREDICT WHETHER OR NOT AN OBJECT WILL CLOSE AN OPEN CIRCUIT.	
0202120004	KNOW HOW A FLASHLIGHT WORKS.	
0202120005	DESCRIBE HOW A FLASHLIGHT WORKS BY DISASSEMBLING ONE AND OBSERVING	

OBJECT.

TO WHETHER THEY EAT MEAT, PLANTS, OR BOTH.

ATION SCHEMES, WRITE AT LEAST ONE PARAGRAPH STATING WHICH ANIMAL  
IN CLASSIFYING ANIMALS.

ATERIALS USED IN OUR DAILY LIVES, CLASSIFY THE MATERIALS ACCORDING TO THEIR  
OR SOLID.

SING A DRY CELL, WIRES, AND A LAMP.

ILL CLOSE AN OPEN CIRCUIT.

DISASSEMBLING ONE AND OBSERVING THE COMPONENTS IN RELATION TO A CIRCUIT.

0202120006	CONSTRUCT A CIRCUIT, USING A DRY CELL, WIRES, AND A	LAMP
0202120007	EXPLAIN WHY AN ELECTRICAL CIRCUIT IS A SYSTEM OF	INTER
0202120008	KNOW THAT HUMAN ENERGY CAN BE USED TO GENERATE	ELECT
0202120009	DEMONSTRATE THAT HIS OWN ENERGY CAN BE USED TO GENERATE	ELECT
0202130	ENERGY TRANSFORMATION (AIR)	
0202130001	CONSTRUCT A HYPOTHESIS THAT THIS EXPANSION OF HEATED AIR IN A	
0202130002	KNOW THAT AIR IN A BOTTLE CAN BE HEATED TO EXPAND A	BALLO
0202130003	DESCRIBE THAT AIR IN A BOTTLE CAN BE HEATED TO EXPAND A	BALLO
0202195	ENERGY TRANSFORMATION (EVAPORATION)	
0202195001	CONSTRUCT A HYPOTHESIS THAT THE MOLECULES MUST HAVE	PASSE
0202195002	KNOW THAT WET MATERIALS DRY WHEN WATER EVAPORATES FROM	THEM.
0202195003	DEMONSTRATE THAT WET MATERIALS DRY WHEN WATER EVAPORATES FROM	
0202275	ENERGY TRANSFORMATION (SUBSTANCE)	

A DRY CELL, WIRES, AND A LAMP, CAUSING THE LAMP TO LIGHT.

CIRCUIT IS A SYSTEM OF INTERACTING OBJECTS.

BE USED TO GENERATE ELECTRICITY.

ENERGY CAN BE USED TO GENERATE ELECTRICITY, BY USING A HAND GENERATOR TO LIGHT A LAMP.

THIS EXPANSION OF HEATED AIR IN A BALLOON MAY BE DUE TO FASTER MOVING MOLECULES.

CAN BE HEATED TO EXPAND A BALLOON.

TLE CAN BE HEATED TO EXPAND A BALLOON.

PORATION)

THE MOLECULES MUST HAVE PASSED INTO THE AIR WHEN WET MATERIALS DRIED.

RY WHEN WATER EVAPORATES FROM THEM.

IALS DRY WHEN WATER EVAPORATES FROM THEM.

0202275001 KNOW THAT SUGAR WILL DISSOLVE EVENLY IN WATER, AND THE PARTICLES  
TASTED.

0202275002 DEMONSTRATE THAT SUGAR WILL DISSOLVE EVENLY IN WATER, AND THE  
BE TASTED.

0202275003 NAME THE PARTICLES IN SUGAR-WATER AS MOLECULES.

0202275004 KNOW THAT THE PARTICLES IN SUGAR-WATER ARE MOLECULES.

0202275005 KNOW THAT SUGAR MOLECULES IN WATER PASS THROUGH A COTTON FILTER,  
PARTICLES NOW VISIBLE.

0202275006 DEMONSTRATE THAT SUGAR MOLECULES IN WATER PASS THROUGH A COTTON  
LEAVING SUGAR PARTICLES NOW VISIBLE.

0202285 ENERGY TRANSFORMATION (WATER)

0202285001 KNOW THAT BOILING WATER CAUSES WATER TO CHANGE TO STEAM, AND THAT

0202285002 DESCRIBE THAT BOILING WATER CAUSES WATER TO CHANGE TO STEAM,

0202285003 KNOW THAT BOILING WATER CAUSES STEAM, AND THAT THE STEAM TAKES UP  
APART.

0202285004 DESCRIBE THAT BOILING WATER CAUSES STEAM, AND THAT THE STEAM TAKES UP  
APART.

0202305 FUELS

0202305001 KNOW THAT OIL DROPS CAN SOAK INTO SANDSTONE.

0202305002 DEMONSTRATE THAT OIL DROPS CAN SOAK INTO SANDSTONE, THUS DEVELOPING  
OF THE SANDSTONE

ONLY IN WATER, AND THE PARTICLES OF SUGAR WILL NOT BE VISIBLE BUT CAN BE  
 SOLVE EVENLY IN WATER, AND THE PARTICLES OF SUGAR WILL NOT BE VISIBLE BUT CAN  
 R AS MOLECULES.

WATER ARE MOLECULES.

ER PASS THROUGH A COTTON FILTER, AND THAT THE WATER CAN EVAPORATE LEAVING SUGAR  
 IN WATER PASS THROUGH A COTTON FILTER, AND THAT THE WATER CAN EVAPORATE  
 BLE.

WATER TO CHANGE TO STEAM, AND THIS CAN DO WORK.

ES WATER TO CHANGE TO STEAM, AND THIS CAN DO WORK.

TEAM, AND THAT THE STEAM TAKES UP MORE ROOM DUE TO MOLECULES MOVING FARTHER

ES STEAM, AND THAT THE STEAM TAKES UP MORE ROOM DUE TO MOLECULES MOVING FARTHER

D SANDSTONE.

ERIC  
 OAK INTO SANDSTONE, THUS DEVELOPING A MODEL OF HOW OIL CAN BE HELD IN ROCK LAYERS

0202305003	KNOW THAT THERE ARE THREE COMPONENT LEVELS OF AN OIL	SUPPLY
0202305004	IDENTIFY THREE COMPONENT LEVELS OF A MODEL OF AN OIL FILLED WITH MARBLES), ---WATER, OIL, AND GAS.	SUPPLY
0202305005	CONSTRUCT A MODEL OF AN OIL SUPPLY IN THE EARTH, BY	MIXING
0202365	HUMAN BODY (GROWTH)	
0202365001	DESCRIBE GROWTH CHANGES, SINCE LAST YEAR, BY USING	GROWTH
0202365002	DEMONSTRATE HEIGHT AND WEIGHT, BY USING A TAPE MEASURE	AND SCALE
0202455	LIGHT	
0202455001	KNOW THAT A BEAM OF SUNLIGHT PASSED THROUGH A PRISM OF THE SPECTRUM.	(OR DIFF
0202455002	DEMONSTRATE THAT A BEAM OF SUNLIGHT PASSES THROUGH A COLORS OF THE SPECTRUM.	PRISM (C
0202455003	KNOW THAT LIGHT TRAVELS IN A STRAIGHT LINE AND IS MIRROR, CAUSING THE LIGHT SPOT TO BE OBSERVED IN ANOTHER DIRECTION	REFLECTE
0202455004	DEMONSTRATE THAT LIGHT TRAVELS IN A STRAIGHT LINE AND IS MIRROR, CAUSING THE LIGHT SPOT TO BE OBSERVED IN ANOTHER DIRECTION	REFLECTE
0202455005	KNOW THAT AN IMAGE IS REFLECTED IN THE MIRROR, AND FRONT OF THE MIRROR.	APPEARS
0202455006	DEMONSTRATE THAT AN IMAGE IS REFLECTED IN THE MIRROR, FRONT OF THE MIRROR, BY USING MIRROR AND YARDSTICK FOR	AND APPE MEASURIN
0202455007	KNOW THAT DIFFERENT AMOUNTS OF LIGHT PASS THROUGH	DIFFEREN

COMPONENT LEVELS OF AN OIL	SUPPLY MODEL IN THE EARTH--WATER, OIL, AND GAS.
LEVELS OF A MODEL OF AN OIL R, OIL, AND GAS.	SUPPLY IN THE EARTH, (BY MIXING OIL AND WATER INTO A JAR
SUPPLY IN THE EARTH, BY	MIXING OIL AND WATER INTO A JAR FILLED WITH MARBLES.

LAST YEAR, BY USING	GROWTH AND WEIGHT MEASUREMENTS.
BY USING A TAPE MEASURE	AND SCALE.

PASSED THROUGH A PRISM	(OR DIFFRACTION GRATING), AND IS SEPARATED INTO COLORS
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LIGHT PASSES THROUGH A	PRISM (OR DIFFRACTION GRATING), AND IS SEPARATED INTO
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STRAIGHT LINE AND IS	REFLECTED WHEN A FLASHLIGHT BEAM IS DIRECTED AT A
TO BE OBSERVED IN ANOTHER	DIRECTION.

IN A STRAIGHT LINE AND IS	REFLECTED WHEN A FLASHLIGHT BEAM IS DIRECTED AT A
TO BE OBSERVED IN ANOTHER	DIRECTION.

IN THE MIRROR, AND	APPEARS AS FAR INTO THE MIRROR AS THE PERSON IS IN
--------------------	--

REFLECTED IN THE MIRROR,	AND APPEARS AS FAR INTO THE MIRROR AS THE STUDENT IS IN
AND YARDSTICK FOR	MEASURING.

LIGHT PASS THROUGH	DIFFERENT MATERIALS.
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0202455008 DEMONSTRATE THAT DIFFERENT AMOUNTS OF LIGHT PASS THROUGH DIFFERENT M  
TRANSPARENT, TRANSLUCENT, AND OPAQUE MATERIALS.

0202460 MACHINES

0202460001 AFTER LEARNING WHAT MACHINES DO FOR THEM, DRAMATIZE WHAT THE WORLD W

0202470 MACHINES (SIMPLE)

0202470001 IDENTIFY PULLEY SYSTEMS IN EVERYDAY OBJECTS.

0202470002 PREDICT WHETHER AN OBJECT WITH A PULLEY WILL MOVE MORE OR LESS EAS  
COMPLETE AN EXPERIMENT TO SEE IF YOU WERE RIGHT.

0202470003 PREDICT WHICH DIRECTION THE PULLEY CORD SHOULD BE PULLED IN ORDER TO  
AN EXPERIMENT TO SEE IF YOU WERE RIGHT.

0202470004 PREDICT WHETHER AN OBJECT ON ROLLERS OR WHEELS WILL MOVE MORE OR LES  
COMPLETE EXPERIMENT TO SEE IF YOU WERE RIGHT.

0202470005 IDENTIFY GEARS ON AN OBJECT.

0202470006 IDENTIFY THE FASTER GEAR ON AN OBJECT WITH TWO GEARS.

0202525 PLANTS (CAPILLARY ACTION)

0202525001 KNOW THAT WATER TRAVELS THROUGH THE STEM AND INTO THE LEAVES.

0202525002 DEMONSTRATE THAT WATER TRAVELS THROUGH THE STEM AND INTO THE LEAVES,  
CONTAINING DYE AND LEAVING IT THERE UNTIL THE COLOR APPEARS IN

ENTS OF LIGHT PASS THROUGH DIFFERENT MATERIALS, BY USING A WIDE VARIETY OF  
OPAQUE MATERIALS.

FOR THEM, DRAMATIZE WHAT THE WORLD WOULD BE LIKE WITHOUT A PARTICULAR MACHINE.

YDAY OBJECTS.

A PULLEY WILL MOVE MORE OR LESS EASILY THAN AN OBJECT WITHOUT A PULLEY.  
IF YOU WERE RIGHT.

LEY CORD SHOULD BE PULLED IN ORDER TO MAKE THE OBJECT MOVE UP OR DOWN. COMPLETE  
E RIGHT.

LLERS OR WHEELS WILL MOVE MORE OR LESS EASILY THAN AN OBJECT WHICH IS NOT.  
OU WERE RIGHT.

OBJECT WITH TWO GEARS.

THE STEM AND INTO THE LEAVES.

THROUGH THE STEM AND INTO THE LEAVES, BY PLACING CUT CELERY STALK IN WATER  
UNTIL COLOR APPEARS IN THE LEAF VEINS.

0202560	PLANTS (NEEDS)	
0202560001	KNOW THAT SEEDS NEED HEAT TO GROW.	
0202560002	DEMONSTRATE THAT SEEDS NEED HEAT TO GROW, BY TRYING TO PLACE, SHOWING THAT SEEDS GROW SUBJECT TO LIMITS OF	SPROUT S THEIR EN
0202560003	KNOW THAT A GREEN PLANT NEEDS WATER.	
0202560004	DEMONSTRATE THAT A GREEN PLANT NEEDS WATER, BY GROWING WATERING OTHERS.	PLANTS I
0202560005	KNOW THAT A GREEN PLANT NEEDS LIGHT.	
0202560006	DEMONSTRATE THAT A GREEN PLANT NEEDS LIGHT BY GROWING	SOME PLA
0202575	PLANTS (ROOTS)	
0202575001	KNOW THAT GROWING SEEDS FORM ROOTS THAT GROW DOWNWARD	TOWARDS
0202575002	DEMONSTRATE THAT GROWING SEEDS FORM ROOTS THAT GROW GLASS CONTAINERS IN DIFFERENT POSITIONS.	DOWNWARD
0202580	PLANTS (SEEDS)	
0202580001	IDENTIFY CONE, SCALE, AND SEED, BY OBSERVING MATURE PINE CONES.	
0202580002	KNOW THAT PARTS OF A MATURE PINE CONE---CONE, SCALE,	AND SEED
0202580003	NAME PARTS AS CONE, SCALE, AND SEED ON MATURE PINE	CONES.
0202580004	DISTINGUISH BETWEEN GROWING BEAN AND CORN SEEDLINGS, BY OBSERVING	

DO GROW.

HEAT TO GROW, BY TRYING TO  
GROW SUBJECT TO LIMITS OF

SPROUT SOME SEEDS IN A WARM PLACE AND OTHERS IN A COLD  
THEIR ENVIRONMENT.

DOES WATER.

PLANT NEEDS WATER, BY GROWING

PLANTS IN THE CLASSROOM AND BY WATERING SOME AND NOT

DOES LIGHT.

PLANT NEEDS LIGHT BY GROWING

SOME PLANTS IN LIGHT AND OTHERS IN DARK.

DO ROOTS THAT GROW DOWNWARD

TOWARDS THE EARTH.

SEEDS FORM ROOTS THAT GROW  
IN DIFFERENT POSITIONS.

DOWNWARD TOWARDS THE EARTH, BY PLACING GROWING SEEDS IN

SEED, BY OBSERVING MATURE PINE CONES.

PINE CONE---CONE, SCALE,

AND SEED.

AND SEED ON MATURE PINE

CONES.

BEAN AND CORN SEEDLINGS, BY OBSERVING THEIR CHARACTERISTICS,

0202580005	KNOW THAT GRASS PLANTS GROW FROM GRASS SEEDS, HEREDITY.	ILLUSTR
0202580006	DEMONSTRATE THAT GRASS PLANTS GROW FROM GRASS SEEDS, HEREDITY.	ILLUSTR
0202580007	DEMONSTRATE THAT EACH ORGANISM GIVES RISE TO ITS OWN	KIND, BY
0202580008	KNOW THE DIFFERENCES BETWEEN GROWING BEAN AND CORN	SEEDLING
0202580009	IDENTIFY THE NEW PLANT AND FOOD FOR GROWTH IN LIMA	BEANS AND
0202595	POLLUTION (WATER)	
0202595001	DEMONSTRATE HOW WATER POLLUTION IS CAUSED AND PREDICT WHAT WILL EXIST.	WHAT WILL
0202600	POLLUTION (WATER AND AIR)	
0202600001	DIVIDE INTO GROUPS AND GATHER INFORMATION ON AT LEAST FIVE CAUSES OF POLLUTION. PAPER GIVING THEIR INFERENCES ON HOW ONE OF THE	FIVE CAUSES OF POLLUTION
0202610	REPRODUCTION	
0202610001	CLASSIFY ANIMAL MOTHERS INTO THESE TWO GROUPS: MOTHERS WHO HAVE	WHO HAVE
0202610002	MATCH ANIMAL PARENTS TO THEIR OFFSPRING.	
0202610003	IDENTIFY THE TERMS MALE, FEMALE, PARENT, AND OFFSPRING	WHEN DIS

GRASS SEEDS, ILLUSTRATING THAT AN ORGANISM IS THE PRODUCT OF ITS  
 FROM GRASS SEEDS, ILLUSTRATING THAT AN ORGANSIM IS THE PRODUCT OF ITS  
 ES RISE TO ITS OWN KIND, BY PLANTING BEAN AND CORN SEEDS.  
 NG BEAN AND CORN SEEDLINGS.  
 OR GROWTH IN LIMA BEANS AND CORN SEEDS WHICH HAVE BEEN SOAKED IN WATER.

CAUSED AND PREDICT WHAT WILL HAPPEN IF THE POLLUTION FACTORS CONTINUE TO

FORMATION ON AT LEAST FIVE CAUSES OF AIR OR WATER POLLUTION AND WRITE A SHORT  
 NOW ONE OF THE POLLUTION FACTORS CAN BE ELIMINATED.

TWO GROUPS: MOTHERS WHO HAVE LIVING BABIES AND MOTHERS WHO LAY EGGS,

SPRING.  
 AND OFFSPRING WHEN DISCUSSING MEMBERS OF ANIMAL FAMILIES.

0202620	SCIENTIFIC METHOD
0202620001	KEEP AN ACCURATE RECORD OF OBJECTS USED IN EXPERIMENT
0202620002	AFTER COLLECTING INFORMATION ABOUT HOW ORGANISMS OF LISTS, NOTES, OR PICTURES.
0202620003	KEEP AN ACCURATE RECORD OF OBJECTS YOU HAVE OBSERVED
0202620004	FOLLOWING A QUESTION AND ANSWER PERIOD DEFINING THE MAKE A LIST OF AT LEAST THREE DIFFERENCES BETWEEN AN
0202625	SOIL
0202625001	EXPLAIN DIFFERENT WAYS ROCK IS BROKEN DOWN TO BECOME
0202625002	GIVEN A CROSS-SECTION OF SOILS, RECOGNIZE LAYERS AS
0202625003	DESCRIBE THE THINGS WE FIND IN DARK TOPSOIL THAT ARE NOT
0202625004	TELL THE THINGS SOIL MUST HAVE TO MAKE PLANTS GROW WELL.
0202625005	TELL HOW SOIL HELPS ANIMALS.
0202625006	TELL WAYS THAT ANIMALS HELP TO MAKE GOOD SOIL.
0202625007	TELL THE WAYS PLANTS HELP MAKE GOOD SOIL.
0202630	SOLAR SYSTEM
0202630001	KNOW THAT THE EARTH REVOLVES IN AN ORBIT AROUND THE SUN.

OF OBJECTS USED IN EXPERIMENT AND THE RESULTS OF EXPERIMENT.

ION ABOUT HOW ORGANISMS INTERACT WITH THEIR ENVIRONMENT, RECORD IT IN THE FORMS  
RES.

OF OBJECTS YOU HAVE OBSERVED INTERACTING AT A DISTANCE (MAGNETISM).

ANSWER PERIOD DEFINING THE DIFFERENCE BETWEEN AN 'OBSERVATION' AND AN 'INFERENCE',  
THREE DIFFERENCES BETWEEN AN OBSERVATION AND AN INFERENCE WITH 100 PER CENT ACCURACY.

CK IS BROKEN DOWN TO BECOME SOIL.

SOILS, RECOGNIZE LAYERS AS TOPSOIL, SUBSOIL, AND BEDROCK.

ND IN DARK TOPSOIL THAT ARE NOT FOUND IN SAND AND SUBSOIL.

HAVE TO MAKE PLANTS GROW WELL.

LS.

LP TO MAKE GOOD SOIL.

MAKE GOOD SOIL.

VES IN AN ORBIT AROUND THE SUN.

0202630002 KNOW THAT THE EARTH ROTATES AS IT REVOLVES AROUND THE SUN.

0202630033 DEMONSTRATE THAT THE EARTH ROTATES AS IT REVOLVES AROUND THE SUN AND BY REVOLVING THE EARTH GLOBE AS IT IS MOVED AROUND THE LAMP.

0202630004 DEMONSTRATE THAT THE EARTH REVOLVES IN AN ORBIT AROUND THE SUN THE SUN AND EARTH.

0202630005 KNOW THAT THE LIGHTED AREA OF THE MOON CHANGES SHAPE, IN RELATION TO THE EARTH.

0202630006 DEMONSTRATE HOW THE LIGHTED AREA OF THE MOON CHANGES SHAPE, BY USING AN ORANGE AND A FLASHLIGHT.

0202640000 SOUND.

0202640001 KNOW THAT SOUND IS A RESULT OF SOMETHING MOVING.

0202640002 DEMONSTRATE THAT SOUND IS A RESULT OF SOMETHING MOVING, BY USING RUBBER BANDS.

0202640003 KNOW THAT SOUND TRAVELS THROUGH VARIOUS SUBSTANCES, SUCH AS WOOD, METAL, PAPER, ETC.

0202640004 DEMONSTRATE THAT SOUND TRAVELS THROUGH VARIOUS SUBSTANCES BY USING SIMPLE SOUND MAKERS.

0202640005 KNOW THAT SOME SOUNDS ARE HIGH AND SOME ARE LOW, BY VARYING THE FREQUENCY OF THE SOUND.

0202640006 DEMONSTRATE THAT SOME SOUNDS ARE HIGH AND SOME ARE LOW, BY VARYING THE FREQUENCY OF THE SOUND MAKERS, SUCH AS DIFFERENT SIZE RUBBERBANDS ON A SOUND BOX.

0202640007 KNOW THAT THE PAPER HORN HELPS THE EAR COLLECT MORE SOUND.

0202640008 CONSTRUCT A PAPER HORN FOR LISTENING, USING CONSTRUCTION PAPER AND A GLASS TUBE.

ES AS IT REVOLVES AROUND THE SUN.

H ROTATES AS IT REVOLVES AROUND THE SUN, BY USING AN EARTH GLOBE AND AN ELECTRIC LAMP,  
H GLOBE AS IT IS MOVED AROUND THE LAMP.

H REVOLVES IN AN ORBIT AROUND THE SUN, BY USING A LARGE AND SMALL BALL AS MODELS OF

A OF THE MOON CHANGES SHAPE, IN RELATION TO THE SUN, EARTH, AND MOON POSITIONS.

ED AREA OF THE MOON CHANGES SHAPE, IN RELATION TO THE SUN, EARTH, AND MOON POSITIONS  
FLASHLIGHT.

LT OF SOMETHING MOVING.

A RESULT OF SOMETHING MOVING, BY USING SIMPLE MATERIALS SUCH AS SOUND BOXES AND RUBBER

THROUGH VARIOUS SUBSTANCES, SUCH AS WOOD, WATER, AND AIR,

RAVELS THROUGH VARIOUS SUBSTANCES, SUCH AS WOOD, WATER, AND AIR, BY USING

E HIGH AND SOME ARE LOW, BY VARYING DIMENSIONS AND VIBRATING SPEED OF SOUND MAKERS.

UNDS ARE HIGH AND SOME ARE LOW, BY VARYING DIMENSIONS AND VIBRATING SPEED OF SOUND  
SIZE RUBBERBANDS ON A SOUND BOX.

HELPS THE EAR COLLECT MORE SOUND.

ER  
NING, USING CONSTRUCTION PAPER AND PAPER FASTENERS.

0202640009	DEMONSTRATE THAT THE PAPER HORN HELPS THE EAR COLLECT LISTENS TO SOUNDS.	MORE SO
0202645	SYSTEMS (INTERACTIONS)	
0202645001	FIND INFORMATION ABOUT HOW LIVING THINGS INTERACT WITH	THEIR E
0202645002	EXPLAIN WHAT FACTORS WILL INFLUENCE THE GROWTH OF AN	ORGANIS
0202645003	DESCRIBE HOW THINGS IN AN AQUARIUM INTERACT TO KEEP IT	BALANCE
0202645004	TELL WHAT SHOULD BE ADDED TO THE CLASS AQUARIUM TO KEEP	THE AQU
0202645005	PRESENT ORALLY TO A GROU FINDINGS ABOUT HOW ORGANISMS EXAMPLES,	INTERAC
0202645006	DEMONSTRATE THROUGH DRAWING, WRITING, OR SEQUENCING ON THE SUN).	PICTURE
0202645007	CLASSIFY SYSTEMS OF OBJECTS ACCORDING TO WHETHER THEY	SHOW EV
0202645008	FIND EVIDENCE OF INTERACTION BY COMPARING SIMILAR	EXPERIM
0202645009	IDENTIFY INTERACTING OBJECTS IN DEMONSTRATIONS OR	PICTURE
0202645010	RECOGNIZE EVIDENCE OF INTERACTION IN DEMONSTRATIONS OR	PICTURE
0202645011	RECOGNIZE CONSERVATION WITHIN A SYSTEM IN WHICH OBJECTS	CHANGE
0202645012	USING VARIOUS SENSES, FIND EVIDENCE OF INTERACTION,	

PER HORN HELPS THE EAR COLLECT MORE SOUND, BY HOLDING THE HORN AGAINST HIS EAR WHILE H

HOW LIVING THINGS INTERACT WITH THEIR ENVIRONMENT. WRITE DOWN WHAT YOU FIND.

LL INFLUENCE THE GROWTH OF AN ORGANISM.

AN AQUARIUM INTERACT TO KEEP IT BALANCED.

ED TO THE CLASS AQUARIUM TO KEEP THE AQUARIUM BALANCED.

UP FINDINGS ABOUT HOW ORGANISMS INTERACT IN THEIR ENVIRONMENT USING PICTURES OR REAL

WING, WRITING, OR SEQUENCING PICTURES THE MEANING OF FOOD CHAIN, INCLUDE DEPENDENCE

ECTS ACCORDING TO WHETHER THEY SHOW EVIDENCE OF INTERACTION AT A DISTANCE.

CTION BY COMPARING SIMILAR EXPERIMENTS.

UJECTS IN DEMONSTRATIONS OR PICTURES.

INTERACTION IN DEMONSTRATIONS OR PICTURES.

WITHIN A SYSTEM IN WHICH OBJECTS CHANGE IN APPEARANCE.

0202645013 IDENTIFY THE SENSE OR SENSES USED TO OBSERVE INTERACTION AT

0202650 SYSTEMS AND SUBSYSTEMS

0202650001 RECOGNIZE SYSTEMS OF INTERACTING OBJECTS.

0202650002 IDENTIFY SYSTEMS OF OBJECTS THAT INTERACT AT A DISTANCE.

0202650003 USE THE WORD SYSTEM CORRECTLY BY RECOGNIZING COMMON ELEM  
SYSTEM.

0202650004 USE THE WORD SYSTEM TO REFER TO A GROUP OF RELATED OBJE  
WHICH MAKE THEM PART OF THE SAME SYSTEM.

SES USED TO OBSERVE INTERACTION AT A DISTANCE. (MAGNETISM)

RACTING OBJECTS.

TS THAT INTERACT AT A DISTANCE.

ETLY BY RECOGNIZING COMMON

ELEMENTS OF OBJECTS WHICH MAKE THEM PART OF THE SAME

FER TO A GROUP OF RELATED  
THE SAME SYSTEM.

OBJECTS AND RECOGNIZE THE COMMON ELEMENTS OF OBJECTS

0203055	ANIMALS	
0203055001	FILL IN OUTLINE. SHOW FIVE CLASSES OF ANIMALS AND 2-3	CHARACT
0203055002	PLACE CLASSES OF ANIMALS IN PROPER ENVIRONMENT.	
0203055003	CHOOSE FRESH-WATER ANIMAL. TELL HOW IT ADAPTED TO ITS	ENVIRON
0203055004	DESCRIBE HOW ONE SEA ANIMAL IS ADAPTED TO LIFE IN SEA.	
0203055005	WRITE STORY ABOUT ANIMAL THAT LIVES IN SPA. DESCRIBE	ITS ENV
0203055006	DESCRIBE THAT BACKBONES OF DIFFERENT ANIMALS, SUCH AS	CHICKEN
	AND THAT EACH BONE HAS A HOLE IN THE MIDDLE.	
0203055007	NAME THE BONES THAT MAKE UP A BACKBONE AS VERTEBRAE,	ANIMALS
	WITHOUT BACKBONES AS INVERTEBRATES.	
0203055008	KNOW THAT BACKBONES OF DIFFERENT ANIMALS ARE MADE OF	BONES TH
	THE MIDDLE.	
0203055009	KNOW THE BONES THAT MAKE UP A BACKBONE AS VERTEBRAE,	ANIMALS
	WITHOUT BACKBONES AS INVERTEBRATES.	
0203055010	PREPARE TWO-PART ANIMAL BOOKLET OF VERTEBRATES AND	INVERTEB
0203055011	GIVE CHARACTERISTICS OF VERTEBRATES.	
0203090	CLASSIFY (MATTER)	
0203090001	DEMONSTRATE 3 STATES OF MATTER AND ITS CHANGES. USE	WATER.
0203090002	KNOW THE DIFFERENCES IN LIMA BEANS AND SIMILAR SIZED	PEBBLES

DIVIDE CLASSES OF ANIMALS AND 2-3 CHARACTERISTICS OF EACH.

IN PROPER ENVIRONMENT.

L. TELL HOW IT ADAPTED TO ITS ENVIRONMENT.

ANIMAL IS ADAPTED TO LIFE IN SEA.

ANIMAL THAT LIVES IN SEA. DESCRIBE ITS ENVIRONMENT. DRAW PICTURES TO ILLUSTRATE STORY.

OF DIFFERENT ANIMALS, SUCH AS CHICKEN AND FISH, ARE MADE OF BONES THAT FIT TOGETHER  
HOLE IN THE MIDDLE.

SET UP A BACKBONE AS VERTEBRAE, ANIMALS WITH BACKBONES AS VERTEBRATES, AND ANIMALS  
INVERTEBRATES.

DIFFERENT ANIMALS ARE MADE OF BONES THAT FIT TOGETHER AND THAT EACH BONE HAS A HOLE IN

SET UP A BACKBONE AS VERTEBRAE, ANIMALS WITH BACKBONES AS VERTEBRATES, AND ANIMALS  
INVERTEBRATES.

BOOKLET OF VERTEBRATES AND INVERTEBRATES.

VERTEBRATES.

MATTER AND ITS CHANGES. USE WATER.

PEBBLES AS LIVING AND NON-LIVING SUBSTANCES.

0203090003 DISTINGUISH BETWEEN LIMA BEANS AND SIMILAR SIZED PEBBLES AS

0203090004 KNOW THAT LIMA BEANS ARE LIVING THINGS AND MAY BE KILLED BY

0203090005 DEMONSTRATE THAT LIMA BEANS ARE LIVING THINGS AND MAY BE KILLED BY  
BEANS BOILED IN WATER TEN MINUTES WILL NOT SPROUT AND BEANS

0203090006 KNOW THAT LIMA BEANS WILL CHANGE, AND SIMILAR SIZED PEBBLES  
AS COMPARED TO THE SAME SUBSTANCES NOT BOILED.

0203090007 DESCRIBE THAT LIMA BEANS WILL CHANGE, AND SIMILAR SIZED PEBBLES  
AS COMPARED TO THE SAME SUBSTANCES NOT BOILED.

0203100 CLASSIFY (PLANT AND ANIMAL)

0203100001 TELL POSSIBLE GEOGRAPHIC REASONS WHY PREHISTORIC PLANTS AND

0203100002 TELL WHAT A FOSSIL IS. TELL WHAT WE LEARN FROM FOSSILS.

0203120 ELECTRICITY

0203120001 BUILD AN ELECTRO MAGNET.

0203120002 CONSTRUCT AN ELECTROMAGNET USING A DRY CELL, AND COVERED COPPER

0203120003 KNOW THAT A NAIL ACTS AS A MAGNET WHEN IT IS IN A COIL OF WIRE

0203120004 DESCRIBE THAT A NAIL ACTS AS A MAGNET ONLY WHEN IT IS IN A COIL

0203120005 DEMONSTRATE THAT ELECTRIC ENERGY CAN MAKE THINGS MOVE, BY USING

AND SIMILAR SIZED PEBBLES AS LIVING AND NON-LIVING SUBSTANCES.

ING THINGS AND MAY BE KILLED BY EXTREMES SUCH AS HEAT.

ARE LIVING THINGS AND MAY BE KILLED BY EXTREMES SUCH AS HEAT, BY SHOWING THAT  
 NUTES WILL NOT SPROUT AND BEANS NOT BOILED WILL SPROUT.

ANGE, AND SIMILAR SIZED PEBBLES WILL NOT CHANGE, WHEN THEY ARE BOILED IN WATER,  
 TANCES NOT BOILED.

L CHANGE, AND SIMILAR SIZED PEBBLES WILL NOT CHANGE, WHEN THEY ARE BOILED IN WATER  
 TANCES NOT BOILED.

REASONS WHY PREHISTORIC PLANTS AND ANIMALS ARE NO LONGER LIVING.

WHAT WE LEARN FROM FOSSILS.

ING A DRY CELL, AND COVERED COPPER WIRE TO FORM A COIL AROUND A LARGE NAIL.

MAGNET WHEN IT IS IN A COIL OF WIRE CONNECTED TO A DRY CELL.

A MAGNET ONLY WHEN IT IS IN A COIL OF WIRE CONNECTED TO A DRY CELL.

ERY CAN MAKE THINGS MOVE, BY USING THE ELECTROMAGNET TO LIFT PAPER CLIPS.

0203120006 KNOW THAT AN ELECTROMAGNET CAN MAKE A BELL RING.

0203120007 DEMONSTRATE THAT AN ELECTROMAGNET CAN MAKE A BELL RING, BY WIRING

0203120008 GIVEN ALL THE COMPONENTS TO CONSTRUCT A COMPLETE ELECTRICAL CIRCUIT ON WHAT WILL HAPPEN IF ALL COMPONENTS ARE CORRECTLY CONNECTED

0203120009 GIVEN WORKING COMPONENTS TO CONSTRUCT ELECTRICAL CIRCUIT AND ONE DEFECTIVE COMPONENT RETARDS WORKING PARTS FROM FUNCTION

0203125 ENERGY TRANSFORMATION

0203125001 DISCOVER THAT ENERGY IS REQUIRED TO CAUSE MOVEMENT BY USING WORK

0203125002 EXPLAIN DIFFERENCE IN STORED ENERGY AND ENERGY OF MOTION.

0203125003 STATE THAT ENERGY CAN BE CHANGED NOT MADE.

0203125004 GIVE THE CORRECT DEFINITION OF THE FOLLOWING IN A MATCHING MOLECULE.

0203130 ENERGY TRANSFORMATION (AIR)

0203130001 KNOW THAT MOVING AIR HAS ENERGY.

0203130002 CONSTRUCT A PINWHEEL, USING A ROUND PIECE OF CARDBOARD, KNITTING

0203130003 DEMONSTRATE THAT WIND WILL HAVE ENERGY OF MOTION BY USE OF PINWHEEL

0203130004 DEMONSTRATE THAT MOVING AIR HAS ENERGY, BY USING THE PINWHEEL PLACING IT IN FRONT OF AN ELECTRIC FAN.

NET CAN MAKE A BELL RING.

ELECTROMAGNET CAN MAKE A BELL RING, BY WIRING THE BELL INTO THE ELECTROMAGNET CIRCUIT.

TO CONSTRUCT A COMPLETE ELECTRICAL CIRCUIT, DEMONSTRATE AND GIVE AN ORAL REPORT  
ALL COMPONENTS ARE CORRECTLY CONNECTED.

TO CONSTRUCT ELECTRICAL CIRCUIT AND ONE DEFECTIVE COMPONENT, DEMONSTRATE HOW ONE  
PARTS WORKING PARTS FROM FUNCTIONING.

REQUIRED TO CAUSE MOVEMENT BY USING WATER AND A BOAT.

STORED ENERGY AND ENERGY OF MOTION.

CHANGED NOT MADE.

ION OF THE FOLLOWING IN A MATCHING TEST: SOLAR ENERGY, ENERGY, HEAT, AND

IR)

ENERGY.

ING A ROUND PIECE OF CARDBOARD, KNITTING NEEDLES, AND RUBBER BANDS.

LL HAVE ENERGY OF MOTION BY USE OF PINWHEEL.

AIR HAS ENERGY, BY USING THE PINWHEEL AND CAUSING IT TO TURN BY BLOWING ON IT OR BY  
FAN FAN.

0203140	ENERGY TRANSFORMATION (BURNING CANDLE)	
0203140001	DEMONSTRATE THAT WE GET LIGHT AND HEAT ENFRGY WHEN A	F
0203185	ENERGY TRANSFORMATION (ELECTRIC)	
0203185001	KNOW THAT ELECTRIC ENERGY CAN MAKE THINGS MOVE.	
0203190	ENERGY TRANSFORMATION (ELEMENTS)	
0203190001	DEMONSTRATE AND ANSWER QUESTIONS ABOUT ELFMENT BEING	MA
0203195	ENERGY TRANSFORMATION (EVAPORATION)	
0203195001	KNOW THAT THE CHANGE FROM LIQUID TO GAS IS CALLED	EV
0203195002	NAME, AS EVAPORATION, THE PROCESS OF THE PERFUME	DI
0203195003	DEMONSTRATE THAT LIQUID CHANGES TO A GAS, BY PLACING A	DR
	(EVAPORATE) WHILE THE ODOR REMAINS.	
0203195004	KNOW THAT A SOLID CAN CHANGE INTO A GAS WITHOUT CHANGING FI	
0203195005	DESCRIBE THAT A SOLID CAN CHANGE INTO A GAS WITHOUT	CH
	MOTHBALLS GET SMALLER OVER A PERIOD OF TIME.	
0203200	ENERGY TRANSFORMATION (FOOD)	
0203200001	INFER THAT ENFRGY FROM FOOD IS RESPONSIBLE FOR GROWTH	AN

6 CANDLE)

PAGE

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AND HEAT ENRGY WHEN A FUEL BURNS. (BY USE OF CANDLE).

(C)

MAKE THINGS MOVE.

(S)

ONS ABOUT ELEMENT BEING MADE ONLY OF ITSELF.

ATION)

UID TO GAS IS CALLED EVAPORATION.

CESS OF THE PERFUME DISAPPEARING AS IT CHANGES FROM A LIQUID TO A GAS.

ES TO A GAS, BY PLACING A DROP OF PERFUME INTO A BOTTLE, CAUSING IT TO DISAPPEAR  
AINS.

INTO A GAS WITHOUT CHANGING FIRST TO A LIQUID.

GE INTO A GAS WITHOUT CHANGING FIRST TO A LIQUID, BY OBSERVING THAT BITS OF  
PERIOD OF TIME.

RESPONSIBLE FOR GROWTH AND THE ABILITY TO WORK.

0203200002 DEMONSTRATE THAT FOOD IS A FUEL BY USE OF BUTTER CANDLE

0203200003 DEMONSTRATE THAT FOOD HAS ENERGY, BY BURNING A PAT OF

0203200004 KNOW THAT FOOD HAS ENERGY.

0203210 ENERGY TRANSFORMATION (HEAT)

0203210001 KNOW THAT HEAT IS A FORM OF ENERGY.

0203210002 GIVE ONE EXAMPLE OF HEAT ENERGY DOING WORK.

0203210003 SHOW THAT HEATED AIR MOVES BY HOLDING PAPER STRIPS

0203210004 DEMONSTRATE THAT HEAT IS A FORM OF ENERGY, BY USING

0203210005 EXPLAIN HOW AN EXPERIMENT SHOWS THAT HEAT IS A FORM OF

0203210006 GIVEN OBJECTS, PREDICT WHICH OBJECT IS A HEAT CONDUCTOR AND TEST YOUR PREDICTIONS.

0203210007 DEMONSTRATE HOW APPLICATION OF HEAT BREAKS UP MOLECULE

0203225 ENERGY TRANSFORMATION (LIGHT AND SOUND)

0203225001 IDENTIFY DEFINITIONS OF LIGHTS AND SOUND AND HOW THEY

FL BY USE OF BUTTER CANDLE.

RGY, BY BURNING A PAT OF BUTTER THAT HAS BEEN FASHIONED INTO A CANDLE.

ENERGY.

GY DOING WORK.

HOLDING PAPER STRIPS OVER THE RADIATOR.

FORM OF ENERGY, BY USING CANDLES BELOW AN ALUMINUM FOIL PINWHEEL TO REVOLVER.

DWS THAT HEAT IS A FORM OF ENERGY.

OBJECT IS A HEAT CONDUCTOR AND WHICH IS NOT, EXPLAIN WHY YOU PREDICTED IN THAT WAY,

OF HEAT BREAKS UP MOLECULE OF SUGAR,

AND SOUND)

SOUND AND HOW THEY TRAVEL. (I.E., SPEED THROUGH AIR, WATER, SOLIDS, ETC.)

0203230 ENERGY TRANSFORMATION (LIQUID)

0203230001 KNOW THAT LIQUID CHANGES TO A GAS.

0203240 ENERGY TRANSFORMATION (MIXTURE)

0203240001 KNOW THAT A MIXTURE CONTAINS SUBSTANCES THAT DO NOT CHANGE

0203240002 DESCRIBE THAT A MIXTURE CONTAINS SUBSTANCES THAT DO NOT CHANGE  
FILINGS AND THEN OBSERVING THE MIXTURE WITH A MAGNIFYING GLASS

0203240003 KNOW THAT A MIXTURE OF SUGAR AND IRON FILINGS CAN BE SEPARATED  
MAGNET TO REMOVE THE IRON FILINGS.

0203240004 DEMONSTRATE THAT A MIXTURE OF SUGAR AND IRON FILINGS CAN BE SEPARATED  
MAGNET TO REMOVE THE IRON FILINGS.

0203240005 KNOW THAT A MIXTURE OF SUGAR AND SAND CAN BE CHANGED INTO  
DISSOLVING THE SUGAR, AND LEAVING THE SAND.

0203240006 DEMONSTRATE THAT A MIXTURE OF SUGAR AND SAND CAN BE CHANGED  
WATER, DISSOLVING THE SUGAR, AND LEAVING THE SAND.

0203240007 KNOW HOW TO SEPARATE LIQUID FROM SAND, BY POURING THROUGH

0203240008 DEMONSTRATE HOW TO SEPARATE THE LIQUID FROM THE SAND, BY POURING  
LEAVING THE SAND.

0203245 ENERGY TRANSFORMATION (MOLECULAR)

0203245001 KNOW THAT ODOR MUST BE DUE TO SOME OF THE TINIEST PARTS OF MOLECULES  
NOSE.

0203245002 DESCRIBE THAT THE ODOR MUST BE DUE TO SOME OF THE TINIEST PARTS  
MOTHBALLS TO HIS NOSE.

0203245003 DEMONSTRATE AND/OR ANSWER QUESTIONS ABOUT SUGAR AS A COMPOUND

A GAS.

RE)

SUBSTANCES THAT DO NOT CHANGE WHEN MIXED TOGETHER.

AINS SUBSTANCES THAT DO NOT CHANGE WHEN MIXED TOGETHER, BY MIXING SUGAR AND IRON  
HE MIXTURE WITH A MAGNIFYING GLASS.

AND IRON FILINGS CAN BE SEPARATED INTO THE ORIGINAL SUBSTANCES, BY USING A  
LINGS.

F SUGAR AND IRON FILINGS CAN BE SEPARATED INTO THE ORIGINAL SUBSTANCES, BY USING A  
LINGS.

AND SAND CAN BE CHANGED INTO A NEW MIXTURE BY PUTTING THE MIXTURE IN WATER,  
AVING THE SAND.

F SUGAR AND SAND CAN BE CHANGED INTO A NEW MIXTURE BY PUTTING THE MIXTURE IN  
AND LEAVING THE SAND.

FROM SAND, BY POURING THROUGH THE MILK CARTON FILTER, LEAVING THE SAND.

THE LIQUID FROM THE SAND, BY POURING THE LIQUID THROUGH THE MILK CARTON FILTER,

ULAR)

DO SOME OF THE TINIEST PARTS OF MOTHBALLS SPREADING FROM THE SOLID MOTHBALLS TO HIS

BE DUE TO SOME OF THE TINIEST PARTS OF MOTHBALLS SPREADING FROM THE SOLID

QUESTIONS ABOUT SUGAR AS A COMPOUND AND ITS THREE ELEMENTS.

0203245004 DEMONSTRATE AND/OR ANSWER QUESTIONS ABOUT THE BREAK UP

0203270 ENERGY TRANSFORMATION (SOLAR)

0203270001 STATE THE EARTH'S CHIEF SOURCE OF RADIANT ENERGY.

0203270002 EXPLAIN HOW WIND IS CAUSED BY HEAT FROM THE SUN.

0203270003 STATE THAT THERE IS STORED ENERGY IN A FUEL AND THAT THAT ONCE GREW IN SUNLIGHT.

0203270004 DEMONSTRATE THAT LIGHT (RADIANT ENERGY) CAN CHANGE INTO SUNLIGHT ONTO THE BULB OF A THERMOMETER, CAUSING THE

0203270005 KNOW THAT LIGHT (RADIANT ENERGY) CAN CHANGE INTO HEAT.

0203270006 USE A RADIOMETER TO DEMONSTRATE HOW LIGHT FROM THE SUN

0203275 ENERGY TRANSFORMATION (SUBSTANCE)

0203275001 KNOW THAT A SOLID DISSOLVED IN SOLUTION CAN BE RECOVERED A

0203275002 DEMONSTRATE THAT A SOLID DISSOLVED IN SOLUTION CAN BE HEATING THE WATER, CAUSING IT TO BOIL AWAY, LEAVING

0203275003 KNOW THAT A SUBSTANCE CAN BE BROKEN APART INTO OTHER

0203275004 DEMONSTRATE THAT A SUBSTANCE CAN BE BROKEN APART INTO COLLECTED ON A GLASS INVERTED OVER IT; ALSO CAUSING

QUESTIONS ABOUT THE BREAK UP OF A MOLECULE OF SUGAR.

AR)  
SOURCE OF RADIANT ENERGY.

BY HEAT FROM THE SUN.

ENERGY IN A FUEL AND THAT THIS ENERGY WAS PROBABLY STORED BY PLANTS AND ANIMALS

DIANT ENERGY) CAN CHANGE INTO HEAT, BY USING A MAGNIFYING GLASS AND BY FOCUSING  
A THERMOMETER, CAUSING THE LIQUID TO RISE.

ENERGY) CAN CHANGE INTO HEAT.

STRATE HOW LIGHT FROM THE SUN CAN BE CHANGED TO ENERGY OF MOTION.

STANCE)

IN SOLUTION CAN BE RECOVERED AS A SOLID.

DISSOLVED IN SOLUTION CAN BE RECOVERED AS A SOLID BY DISSOLVING SALT IN WATER; THEN  
IT TO BOIL AWAY, LEAVING NEARLY ORIGINAL AMOUNT OF SALT LEFT AS SOLID.

BE BROKEN APART INTO OTHER SUBSTANCES.

BE CAN BE BROKEN APART INTO OTHER SUBSTANCES, BY HEATING SUGAR, CAUSING STEAM TO  
IT; ALSO CAUSING MATERIAL LEFT TO TURN BLACK AND CHANGE.

0203285 ENERGY TRANSFORMATION (WATER)

0203285001 KNOW THAT MOVING WATER HAS ENERGY.

0203285002 DEMONSTRATE THAT MOVING WATER HAS ENERGY, BY POURING WATER TO TURN.

0203285003 USE A PINWHEEL TO DEMONSTRATE THAT MOVING WATER CAN MOVE OBJECTS.

0203285004 KNOW THAT THE WEIGHT OF WATER DOES NOT CHANGE AS WATER CHANGES.

0203285005 DEMONSTRATE THAT THE WEIGHT OF WATER DOES NOT CHANGE AS WATER CHANGES FROM ICE BEFORE AND AFTER THE ICE MELTS.

0203285006 KNOW THAT WATER CAN BE CHANGED QUICKLY FROM SOLID TO GAS.

0203285007 DEMONSTRATE THAT WATER CAN BE CHANGED QUICKLY FROM SOLID TO GAS BY BOILING.

0203300 FORCE AND MOTION

0203300001 GIVEN A 4 WHEELED CART AND RAMP, SHOW BY DEMONSTRATION WHICH FACTORS AFFECT MOTION.

0203350 HUMAN BODY (EAR)

0203350001 IDENTIFY THESE PARTS OF THE EAR AND TELL WHAT THEY DO. OUTER EAR, EYELID, DRUM, HAMMER, ANVIL, COCHLEA, AND NERVE.

0203360 HUMAN BODY (EYE)

0203360001 IDENTIFY THESE PARTS OF THE EYE AND TELL WHAT THEY DO. EYELID, CORNEA, LENS, RETINA, AND OPTIC NERVE.

ENERGY.

HAS ENERGY, BY POURING WATER OVER THE PINWHEEL, CAUSING THE VANES OF THE WHEEL  
 THAT MOVING WATER CAN MOVE OBJECTS.

DOES NOT CHANGE AS WATER CHANGES FROM LIQUID TO SOLID.

OF WATER DOES NOT CHANGE AS WATER CHANGES FROM LIQUID TO SOLID BY WEIGHING A JAR OF  
 MELTS.

ID QUICKLY FROM SOLID TO GAS

CHANGED QUICKLY FROM SOLID TO GAS BY PLACING A PAN OF ICE OVER HIGH HEAT, CAUSING

AMP, SHOW BY DEMONSTRATION WHICH WAY THE CART PULLS EASIEST---UP THE RAMP OF DOWN.

EAR AND TELL WHAT THEY DO. OUTER EAR, MIDDLE EAR, INNER EAR, PINNA, EAR CANAL, EAR  
 AND NERVE.

YE AND TELL WHAT THEY DO, EYELID, EYELASHES, IRIS, PUPIL, AND TEAR DUCT.

0203445	INSECTS	
0203445001	RECOGNIZE WHEN A PICTURE OF AN INSECT IS IN AN ADULT, EGG, L	THEY OCCUR.
0203455	LIGHT	
0203455001	GIVEN A SERIES OF PICTURES OF OBJECTS OR ACTUAL OBJECTS, RECOGNI	
0203470	MACHINES (SIMPLE)	
0203470001	IDENTIFY DEFINITIONS OF A SIMPLE MACHINE.	
0203470002	TELL THE BENEFITS OF SIMPLE MACHINES.	
0203470003	RECOGNIZE WHICH TYPE OF SIMPLE MACHINE (INCLINED PLANE, WEDGE,	
0203470004	RECOGNIZE WHICH TYPE OF SIMPLE MACHINE (PULLEY, SCREW, OR WHEE	
0203470005	DESCRIBE THE SIMPLE MACHINES YOU HAVE OBSERVED IN YOUR OWN HOM	
0203525	PLANTS (CAPILLARY ACTION)	
0203525001	KNOW THAT WATER CAN MOVE UP A SUBSTANCE.	
0203525002	KNOW THAT THE FORCE THAT CAUSES THE LIQUID TO RISE UP THE BLO	
0203525003	DEMONSTRATE HOW WATER CAN MOVE UP A SUBSTANCE, BY PLACING	AND ANOTHER IN WATER CONTAINING RED INK, CAUSING BOTH LIQUIDS

INSECT IS IN AN ADULT, EGG, LARVA OR PUPA STAGE. RECOGNIZE THE ORDER IN WHICH

OBJECTS OR ACTUAL OBJECTS, RECOGNIZE IF THE OBJECT PRODUCES OR REFLECTS LIGHT.

LE MACHINE.

CHINES.

MACHINE (INCLINED PLANE, WEDGE, LEVER) IS BEING USED IN A GIVEN SITUATION.

MACHINE (PULLEY, SCREW, OR WHEEL) IS BEING USED IN A GIVEN SITUATION.

YOU HAVE OBSERVED IN YOUR OWN HOME.

SUBSTANCE.

THE LIQUID TO RISE UP THE BLOTTER IS SIMILAR TO THAT WHICH WORKS IN PLANTS.

UP A SUBSTANCE, BY RED INK, CAUSING BOTH PLACING ONE STRIP OF BLOTTER PAPER IN A GLASS OF WATER LIQUIDS TO RISE UP THE BLOTTERS.

0203525004 DESCRIBE THAT THE FORCE THAT CAUSES THE LIQUID TO RISE UP THE BLO

0203525005 KNOW THAT A SOLUTION WILL MOVE UP A PLANT STEM.

0203525006 DEMONSTRATE THAT A SOLUTION WILL MOVE UP A PLANT STEM BY PLACING A  
AND BY OBSERVING THAT IN TIME THE COLOR APPEARS IN THE LEAVES.

0203545 PLANTS (GROWTH)

0203545001 KNOW THAT ALL GREEN PLANTS MAKE FOOD.

0203545002 DEFINE CHLOROPHYLL.

0203545003 MAKE DISPLAY OF PLANTS THAT DO NOT MAKE FOOD.

0203555 PLANTS (MOLDS)

0203555001 NAME THE THINGS GROWING AS MOLDS, WHICH ARE FUNGI PLANTS ON MOLDED

0203560 PLANTS (NEEDS)

0203560001 KNOW THE CONDITIONS UNDER WHICH A PLANT THAT IS NOT GREEN WILL

0203560002 DEMONSTRATE CONDITIONS UNDER WHICH PLANT THAT IS NOT GREEN WILL  
BREAD AND TOAST WETTED WITH DIFFERENT AMOUNTS OF WATER CAUSING NON

0203560003 KNOW THAT PLANTS FLOODED WITH WATER NOT ONLY HAVE TOO MUCH WATER  
SOIL, AND IN A SENSE ARE DROWNING IN WATER.

USES THE LIQUID TO RISE UP THE BLOTTER IS SIMILAR TO THAT WHICH WORKS IN PLANTS

UP A PLANT STEM.

L MOVE UP A PLANT STEM BY PLACING A CUT CELERY STALK INTO WATER CONTAINING DYE,  
HE COLOR APPEARS IN THE LEAVES.

FOOD.

NOT MAKE FOOD.

S, WHICH ARE FUNGI PLANTS ON MOLDED BREAD.

A PLANT THAT IS NOT GREEN WILL GRO

ICH PLANT THAT IS NOT GREEN WILL GROW PLACING IN DIFFERENT LOCATIONS FRESH  
FERENT AMOUNTS OF WATER CAUSING NONGREEN PLANT GROWTH ON SOME.

AT ERIC T ONLY HAVE TOO MUCH WATER, BUT ARE NOT GETTING ENOUGH OXYGEN FROM THE  
NG ATER.

- 0203560004 DESCRIBE THAT PLANTS FLOODED WITH WATER NOT ONLY HAVE TOO MUCH WATER  
THE SOIL, AND IN A SENSE ARE DROWNING IN WATER.
- 0203560005 KNOW THAT GROWING PLANTS MAY DIE FROM TOO MUCH WATER AS WELL AS FROM
- 0203560006 DEMONSTRATE THAT PLANTS MAY DIE FROM TOO MUCH WATER, OR FROM COMPLETE  
RADISH PLANTS, NOT WATERING ONE, WETTING ONE AND DROWNING ONE.
- 0203560007 KNOW THE EFFECT OF SUNLIGHT AND LACK OF SUNLIGHT ON GREEN LEAVES
- 0203560008 DEMONSTRATE THE EFFECT OF SUNLIGHT AND LACK OF SUNLIGHT ON GREEN LEAVES  
PAPER FOR TWO DAYS, AND THEN OBSERVING THE PALE COLOR OF THE COVERED
- 0203570 PLANTS (PARTS)
- 0203570001 KNOW THE DIFFERENT PARTS OF A FLOWER AS PETALS, STAMENS, POLLEN, PISTIL
- 0203570002 NAME PARTS OF A FLOWER, AS PETALS, STAMENS, POLLEN, PISTIL, AND
- 0203570003 IDENTIFY DIFFERENT PARTS OF A FLOWER BY OBSERVING WITH A MAGNIFYING
- 0203570004 KNOW THE DIFFERENCE BETWEEN PARTS OF A PLANT THAT LOOK GREEN (LEAVES)
- 0203570005 DISTINGUISH BETWEEN PARTS OF A PLANT THAT LOOK GREEN (LEAVES) AND
- 0203570006 KNOW THAT THE GREEN COLOR IN THE LEAVES CAN BE REMOVED.
- 0203570007 DEMONSTRATE THAT GREEN COLOR IN THE LEAVES CAN BE REMOVED BY SOAKING  
CAUSING ALCOHOL TO TURN GREEN; THAT NO COLOR OCCURS WHEN ROOTS ARE

PLANTS WITH WATER NOT ONLY HAVE TOO MUCH WATER, BUT ARE NOT GETTING ENOUGH OXYGEN FROM ARE DROWNING IN WATER.

PLANTS MAY DIE FROM TOO MUCH WATER AS WELL AS FROM COMPLETE LACK OF WATER.

PLANTS MAY DIE FROM TOO MUCH WATER, OR FROM COMPLETE LACK OF WATER, BY USING THREE POTS OF ONE, WETTING ONE AND DROWNING ONE, NOTING OUTCOME.

PLANTS HT AND LACK OF SUNLIGHT ON GREEN LEAVES.

PLANTS SUNLIGHT AND LACK OF SUNLIGHT ON GREEN LEAVES, BY COVERING SOME LEAVES WITH CARBON WHEN OBSERVING THE PALE COLOR OF THE COVERED LEAVES.

IDENTIFYING PARTS OF A FLOWER AS PETALS, STAMENS, POLLEN, PISTIL, AND OVULES.

IDENTIFYING PARTS OF A FLOWER AS PETALS, STAMENS, POLLEN, PISTIL, AND OVULES.

IDENTIFYING PARTS OF A FLOWER BY OBSERVING WITH A MAGNIFYING GLASS.

IDENTIFYING PARTS OF A PLANT THAT LOOK GREEN (LEAVES) AND PARTS THAT DO NOT LOOK GREEN (ROOTS).

IDENTIFYING PARTS OF A PLANT THAT LOOK GREEN (LEAVES) AND PARTS THAT DO NOT LOOK GREEN (ROOTS).

IDENTIFYING PARTS OF A PLANT THAT CAN BE REMOVED.

IDENTIFYING PARTS OF A PLANT THAT CAN BE REMOVED BY SOAKING GREEN LEAVES IN WARMED ALCOHOL FOR GREEN; THAT NO COLOR OCCURS WHEN ROOTS ARE TREATED IN SAME WAY.

0203575 PLANTS (ROOTS)

0203575001 KNOW THE DIFFERENCE BETWEEN ROOT HAIRS ON THE MAIN ROOT OF A GROWING  
FOOD MARKET.

0203575002 IDENTIFY ROOT HAIRS ON THE MAIN ROOT OF A GROWING RADISH PLANT, AND  
OBSERVING WITH A MAGNIFYING GLASS.

0203615 REPTILES (EXTINCT)

0203615001 TELL WHAT EXTINCT MEANS.

0203615002 TELL WHY DINOSAURS ARE EXTINCT.

0203625 SOIL

0203625001 EXPLAIN 'THE EARTH'S GREATEST TREASURES ARE IN THE SOIL.'

0203625002 DO RESEARCH IN LIBRARY AND IN COMMUNITY TO FIND OUT HOW TO CONSERVE

0203625003 KNOW THAT DIFFERENT KINDS OF SOILS HOLD VARYING AMOUNTS OF WATER.

0203625004 DEMONSTRATE DIFFERENT KINDS OF SOILS HOLDING VARYING AMOUNTS OF  
POURING EQUAL AMOUNTS OF WATER; OBSERVING DIFFERENT AMOUNTS OF

0203625005 KNOW THAT HUMUS SOIL HOLDS MORE WATER THAN GARDEN SOIL AND THAT GA

0203625006 IDENTIFY THAT HUMUS SOIL HOLDS MORE WATER THAN GARDEN SOIL AND TH

0203625007 KNOW THAT GARDEN SOIL CONTAINS WATER, A LIQUID.

0203625008 DEMONSTRATE THAT GARDEN SOIL CONTAINS A LIQUID (WATER) BY HEATING  
DROPS OF LIQUID TO COLLECT ON THE INSIDE OF THE POT.

HAIRS ON THE MAIN ROOT OF A GROWING RADISH PLANT, AND ON A RADISH PLANT FROM  
 ROOT OF A GROWING RADISH PLANT, AND ON A RADISH PLANT FROM A FOOD MARKET,

MEASURES ARE IN THE SOIL.

COMMUNITY TO FIND OUT HOW TO CONSERVE SOIL.

LS HOLD VARYING AMOUNTS OF WATER.

SOILS HOLDING VARYING AMOUNTS OF WATER BY PLACING DIFFERENT TYPE INTO TIN CAN  
 OBSERVING DIFFERENT AMOUNTS OF WATER PASSING THROUGH SOIL.

WATER THAN GARDEN SOIL AND THAT GARDEN SOIL HOLDS MORE WATER THAN SAND.

MORE WATER THAN GARDEN SOIL AND THAT GARDEN SOIL HOLDS MORE WATER THAN SAND.

WATER, A LIQUID.

AINS A LIQUID (WATER) BY HEATING SOIL IN A COVERED GLASS COOKING POT, CAUSING  
 E OF THE POT.

0203625009 KNOW THAT GARDEN SOIL CONTAINS AIR.

0203625010 DEMONSTRATE THAT GARDEN SOIL CONTAINS AIR, BY POURING WATER SLOWLY FROM THE SOIL UP THROUGH THE WATER AND OUT INTO THE AIR.

0203625011 KNOW THAT GARDEN SOIL CONTAINS MATERIALS THAT WILL PASS THROUGH A FILTER.

0203625012 DEMONSTRATE THAT DISSOLVED MATERIALS IN WATER-SOIL MIXTURE CAN BE COLLECTED THROUGH FILTER INTO A SHALLOW GLASS PAN, ALLOWING THE WATER TO EVAPORATE.

0203625013 KNOW THAT THE SUBSTANCES LEFT AFTER EVAPORATION OF WATER-SOIL MIXTURE ARE MINERALS.

0203625014 NAME, AS MINERALS, THE SUBSTANCES LEFT FROM EVAPORATION OF THE WATER-SOIL MIXTURE.

0203625015 KNOW THAT DISSOLVED MATERIALS IN THE WATER-SOIL MIXTURE CAN BE RECOVERED BY EVAPORATION.

0203625016 DEMONSTRATE THAT SOIL CONTAINS MATERIALS THAT WILL PASS THROUGH A FILTER, CAUSING THE CLOUDY LIQUID TO BECOME CLEAR.

0203630 SOLAR SYSTEM

0203630001 STATE THE 'BIG IDEA' OF THIS UNIT---ALL THE PLANETS AND THEIR MOONS ORBIT THE SUN.

0203630002 USING A PICTURE SHOWING POSITION OF PLANETS AND THE SUN, TELL WHICH PLANET IS CLOSEST TO THE SUN, AND WHICH IS FARTHEST.

0203630003 NAME THE PLANETS IN ORDER OF THEIR DISTANCE FROM THE SUN.

0203630004 EXPLAIN WHY WE THINK THAT EARTH IS THE ONLY PLANET ON WHICH WE KNOW THERE ARE LIFE FORMS.

0203630005 TELL WHICH PLANET HAS MANY GREEN PLANTS AND MANY ANIMALS.

IR.

RETAINS AIR, BY POURING WATER SLOWLY OVER SOIL IN A JAR, CAUSING BUBBLES TO RISE AND OUT INTO THE AIR.

MATERIALS THAT WILL PASS THROUGH A FILTER.

SUBSTANCES IN WATER-SOIL MIXTURE CAN BE RECOVERED, BY POURING CLOUDY WATER INTO A SHALLOW GLASS PAN, ALLOWING LIQUID TO EVAPORATE, LEAVING SUBSTANCES.

AFTER EVAPORATION OF WATER-SOIL MIXTURE ARE CALLED MINERALS.

SUBSTANCES LEFT FROM EVAPORATION OF THE WATER-SOIL MIXTURE.

THE WATER-SOIL MIXTURE CAN BE RECOVERED.

MATERIALS THAT WILL PASS THROUGH A FILTER, BY MIXING GARDEN SOIL AND WATER; THEN POURING THE CLOUDY LIQUID TO PASS THROUGH.

THE--ALL THE PLANETS AND THEIR MOONS GET THEIR ENERGY FROM THE SUN.

OF PLANETS AND THE SUN, TELL WHICH TWO PLANETS RECEIVE MORE HEAT FROM THE SUN.

THEIR DISTANCE FROM THE SUN.

IS THE ONLY PLANET ON WHICH WE COULD LIVE.

AND MANY ANIMALS.

- 0203630006 TELL DIFFERENCE BETWEEN ROTATION AND REVOLUTION OF THE EARTH.
- 0203630007 RECOGNIZE HOW ROTATION AND REVOLUTION CAUSE CHANGES IN LENGTH OF EARTH.
- 0203630008 USE A PLANETARIUM AND KNOWLEDGE GAINED FROM INDIVIDUAL STUDY TO DETERMINE WHAT IT IS FROM THE SUN, AND ITS REVOLUTION AND ROTATION DETERMINE WHAT IT IS.
- 0203630009 USING A PICTURE SHOWING POSITION OF PLANETS AND THE SUN, TELL WHICH HEAT FROM THE SUN.
- 0203630010 DEMONSTRATE THE PATH OF THE MOON, BY USING PEOPLE AS MODELS OF MOON AROUND THE EARTH SO THAT THE STUDENT-MOON ALWAYS FACES THE EARTH.
- 0203630011 KNOW THE PATH OF THE MOON IN RELATIONSHIP TO THE SUN AND EARTH.
- 0203630012 DESCRIBE THAT ONE SIDE OF THE MOON ALWAYS FACES THE EARTH BUT DEMONSTRATE THE WAY THE STUDENT FACES AS THE PATH OF THE MOON IS.
- 0203630013 KNOW THAT ONE SIDE OF THE MOON ALWAYS FACES THE EARTH BUT DOES NOT.
- 0203630014 USE A PLANETARIUM AND SHOW HOW AND WHY THE MOON APPEARS TO CHANGE.
- 0203630015 DESCRIBE SIZE, SHAPE, COLOR, STATE OF MATTER, AND TEMPERATURE.
- 0203630016 IF GIVEN ACCESS TO TELESCOPE, COMPARE HOW THE MOON LOOKS THROUGH A TELESCOPE.
- 0203630017 USE MATHEMATICAL EQUATION TO SHOW HOW THE MASS OF MOON AFFECTS THE GRAVITY.

0203640

SOUND

0203640001

DEMONSTRATE HOW SOUNDS WILL BE DIFFERENT WHEN MADE BY DIFFERENT OBJECTS.

ION AND REVOLUTION OF THE EARTH.

EVOLUTION CAUSE CHANGES IN LENGTH OF DAYLIGHT AND TYPE OF SEASON ON GIVEN AREA OF

GE GAINED FROM INDIVIDUAL STUDY TO DISCUSS HOW THE SIZE OF A PLANET, ITS POSITION  
ION AND ROTATION DETERMINE WHAT IT IS LIKE.

ION OF PLANETS AND THE SUN, TELL WHICH PLANET HAS MOST NEARLY THE SAME AMOUNT OF

MOON, BY USING PEOPLE AS MODELS OF THE MOON, EARTH, AND SUN, AND BY MOVING THE  
THE STUDENT-MOON ALWAYS FACES THE EARTH.

RELATIONSHIP TO THE SUN AND EARTH.

MOON ALWAYS FACES THE EARTH BUT DOES NOT ALWAYS FACE THE SUN, BY OBSERVING THE  
PATH OF THE MOON IS DEMONSTRATED.

N ALWAYS FACES THE EARTH BUT DOES NOT ALWAYS FACE THE SUN.

W AND WHY—THE MOON APPEARS TO CHANGE.

STATE OF MATTER, AND TEMPERATURE OF SUN AND EARTH.

COMPARE HOW THE MOON LOOKS THROUGH A TELESCOPE WITH HOW IT LOOKS TO THE EYE.

SHOW HOW THE MASS OF MOON AFFECTS THE WEIGHT OF AN OBJECT ON THE MOON.

0203650      SYSTEMS AND SUBSYSTEMS

0203650001      IDENTIFY DEFINITIONS AND EXAMPLES OF SYSTEMS.

0203650002      NAME THE PARTS OF A SOLUTION THAT ARE SUBSYSTEMS OF THAT SOLUTION.

0203650003      NAME THE PARTS OF A FILTERING SYSTEM AND TELL WHAT THEY DO.

0203650004      IDENTIFY DEFINITIONS AND EXAMPLES OF SUBSYSTEMS.

0204005 ADAPTATION (ANIMALS)

0204005001 KNOW HOW THE EMBRYONIC STRUCTURES ARE A SPECIAL ADAPTATION T

0204005003 GIVEN DESCRIPTION OR PICTURE OF THE COLORING OF ANIMAL AND ANIMAL'S  
WOULD SURVIVE BY BLENDING WITH ITS HABITAT.

0204005004 TELL HOW BODY COVERINGS HELP ANIMALS TO ADAPT TO CERTAIN CLIMATES.

0204005005 MATCH ILLUSTRATIONS OF FOLLOWING ANIMAL STRUCTURES WITH TASK FOR WHY  
FEET, HOOFES, TOES, WINGS, FINS.

0204005006 MATCH MOUTH ADAPTATIONS TO KINDS OF FOOD TO BE GATHERED BY AN ANIMAL

0204005007 MATCH BREATHING STRUCTURE (LUNGS OR GILLS) OF COMMON ANIMAL TO HA

0204005008 MATCH DEFINITIONS WITH FOLLOWING TERMS: BIRTH, DEATH, SURVIVE, ADA

0204010 ADAPTATION (BEHAVIOR)

0204010001 KNOW THAT BEHAVIOR MAY BE INBORN OR LEARNED.

0204010002 KNOW THAT ALL ORGANISMS HAVE INBORN BEHAVIOR THAT ADAPTS THEM TO THEIR

0204010003 DEMONSTRATE HOW ORGANISMS BECAUSE OF THEIR INBORN BEHAVIOR ADAP

0204020 ADAPTATION (FOOD)

0204020001 KNOW THAT LIVING THINGS NEED A FOOD SUPPLY.

0204020002 KNOW THAT AN ORGANISM NEEDS FOOD FOR GROWTH.

S ARE A SPECIAL ADAPTATION TO ENVIRONMENT.

THE COLORING OF ANIMAL AND ANIMAL'S HABITAT, EXPLAIN WHETHER OR NOT ANIMAL  
ITS HABITAT.

IMALS TO ADAPT TO CERTAIN CLIMATES.

ANIMAL STRUCTURES WITH TASK FOR WHICH THEY ARE BEST SUITED: CLAWS, WEBBED  
OF FOOD TO BE GATHERED BY AN ANIMAL.

OR GILLS) OF COMMON ANIMAL TO HABITAT FOR WHICH IT IS BEST SUITED.

TERMS: BIRTH, DEATH, SURVIVE, ADAPT, AND EXTINCT.

OR LEARNED.

ORN BEHAVIOR THAT ADAPTS THEM TO THEIR ENVIRONMENT.

E OF THEIR INBORN BEHAVIOR ADAPT TO VARIOUS ENVIRONMENTS.

OOD SUPPLY.

FOR GROWTH.

0204025

ADAPTATION (HABITAT)

0204025001

KNOW THAT A LIVING THING REPRODUCES ITSELF AND DEVELOPS IN A G

0204025002

KNOW THAT DIFFERENT ANIMALS ARE ADAPTED TO DIFFERENT SPECIA

0204025003

KNOW THAT LIVING THINGS ARE DEPENDENT ON A PARTICULAR ENVIRO

0204025004

KNOW WHY THE LIFE CYCLE OF AN ANIMAL IS ADAPTED TO THE SPECIA

0204025005

KNOW THAT A LIVING THING IS DEPENDENT ON ALL THE CONDIT  
ENVIRONMENT.

0204025006

KNOW THAT THE ENVIRONMENT OF A LIVING THING INCLUDES ALL SURROU  
DIFFERENT PLANTS HAVE ADOPTED TO DIFFERENT ENVIRONMENTS.

0204025007

TELL WHAT MOST ORGANISMS NEED TO STAY ALIVE.

0204025008

KNOW HOW LIVING THINGS CAPTURE MATTER FROM THE ENVIRO

0204025009

KNOW HOW A LIVING THING MAY BE ADAPTED TO DIFFERENT ENVIRO

0204025010

GIVE THE DEFINITION OF HABITAT.

0204025011

IDENTIFY DEFINITION OF HABITAT. MATCH ORGANISMS WITH PICTUR  
THEY ARE BEST ADAPTED.

0204025012

SHOW UNDERSTANDING OF ADAPTATION TO ENVIRONMENT BY GIVING  
DIFFERENT ENVIRONMENTS.

0204030

ADAPTATION (MAN)

0204030001

KNOW HOW KNOWLEDGE OF CONCEPTS, WHETHER OBTAINED BY TRIAL  
TO KEEPING MAN ALIVE.

PRODUCES ITSELF AND DEVELOPS IN A GIVEN ENVIRONMENT.

ARE ADAPTED TO DIFFERENT SPECIAL ENVIRONMENTS.

DEPENDENT ON A PARTICULAR ENVIRONMENT.

AN ANIMAL IS ADAPTED TO THE SPECIAL ENVIRONMENT, OR HABITAT.

DEPENDENT ON ALL THE CONDITIONS AND ALL OTHER LIVING THINGS IN ITS

A LIVING THING INCLUDES ALL SURROUNDING CONDITIONS THAT AFFECT ITS GROWTH.  
TO DIFFERENT ENVIRONMENTS.

TO STAY ALIVE.

RE MATTER FROM THE ENVIRONMENT AND RETURN IT TO THE ENVIRONMENT.

BE ADAPTED TO DIFFERENT ENVIRONMENTS.

AT.

AT. MATCH ORGANISMS WITH PICTURES, DESCRIPTIONS, OR NAMES OF HABITATS TO WHICH

TION TO ENVIRONMENT BY GIVING TWO EXAMPLES OF LIVING THINGS NEEDING SPECIAL AND

TS, WHETHER OBTAINED BY TRIAL AND ERROR OR BY INVESTIGATION, HAS BEEN ESSENTIAL

0204030002 EXPLAIN HOW, BY USING HIS BRAIN TO MODIFY THE ENVIRON  
WHICH HE IS NOT STRUCTURALLY ADAPTED.

0204030003 ENGAGE IN A PROJECT AND DEMONSTRATE, USING A VARIETY OF MEDIA,  
SCIENCE CONCEPTS, HAS BEEN ALTERED BY HUMAN ACTIVITIES.

0204035 ADAPTATION (PLANTS)

0204035001 MATCH DESCRIPTIONS OR DRAWINGS OF SEEDS WITH MEANS BY WHICH  
PLANT TO ANOTHER PLANT.

0204045 AIR

0204045001 KNOW THAT NITROGEN IS THE MOST PLENTIFUL GAS IN THE AIR.

0204045002 KNOW THAT ABOUT ONE FIFTH OF AIR IS OXYGEN.

0204045003 KNOW WARM AIR IS FORCED UPWARD BY COOLER AIR SURROUNDING IT.

0204045004 KNOW HOW AIR CAN BE COLLECTED AND CLEANED BY THE DISPLAC

0204055002 KNOW HOW ANIMALS HAVE BEEN ADAPTED TO MEET THE NEEDS OF THEIR E

0204060 BIRDS

0204060001 DESCRIBE A CHICKEN EGG, BY OBSERVING WITH A HAND LENS THE OUT

0204060002 IDENTIFY PARTS OF THE CHICKEN EGG AS SHELL, MEMBRANE, YOLK, A  
WHEN IT JOINS WITH SPERM.

MODIFY THE ENVIRONMENT, MAN IS ABLE TO LIVE IN ENVIRONMENTS TO  
D.  
USING A VARIETY OF MEDIA, HOW PHYSICAL ENVIRONMENT IN AT LEAST TWO AREAS O  
BY HUMAN ACTIVITIES.

EEDS WITH MEANS BY WHICH THEY TRAVEL (WIND, WATER, OR ANIMALS) FROM PARENT

TIFUL GAS IN THE AIR.

OXYGEN.

COOLER AIR SURROUNDING IT.

LEANED BY THE DISPLACEMENT METHOD.

TO MEET THE NEEDS OF THEIR ENVIRONMENT.

G WITH A HAND LENS THE OUTSIDE AND INSIDE OF THE EGG.

S, MEMBRANE, YOLK, AND WHITE SPECK ON THE YOLK, WHICH BECOMES EMBRYO

0204060003 KNOW WHY IN BOTH STRUCTURE AND BEHAVIOR (MIGRATION) THE DUCK IS AD

0204060004 TELL OR ILLUSTRATE (BY DRAWING, ETC.) HOW A DUCK IS ADAPTED FOR  
THE EGG IS ADAPTED TO THE LIFE OF THE EMBRYO.

0204065 CELLS

0204065001 KNOW THAT LIVING THINGS ARE MADE OF CELLS. THEY HAVE A COMPLEX S

0204065002 KNOW HOW LIVING THINGS GROW BY CELL DIVISION.

0204065003 KNOW THAT THE STRUCTURE OF CELLS VARIES ACCORDING TO THE FUNCTIONS

0204065004 DESCRIBE AS MANY DIFFERENCES AS YOU CAN WHEN OBSERVING PLANT AND

0204065005 IDENTIFY FROM LIST WHICH NAMES CELL STRUCTURES, OR FROM PICTURES  
TRAITS WHICH ARE PRESENT ONLY IN PLANT CELLS, ONLY IN ANIMAL CE

0204065006 GIVEN SIMPLE SLIDE AND MICROSCOPE, CLASSIFY OBJECTS ON SLIDE AS  
BUBBLES, DIRT, CRYSTALS).

0204065007 ESTABLISH A RELATIONSHIP BETWEEN THE MOLD ON BREAD TO THE ACTION  
CELLS.

0204075 CLASSIFY (ANIMALS)

0204075001 ON BASIS OF DISTINCT CHARACTERISTICS, CLASSIFY COMMON ANIMALS AS  
AMPHIBIANS, REPTILES, BIRDS, OR MAMMALS.

0204075002 GIVEN A LIST OF 12 WORDS IN WHICH ARE MAMMALS AND BIRDS, PUT ALL W  
TO EACH GROUP.

0204075003 KNOW THAT EVERY SPECIES OF ANIMAL HAS A LIFE CYCLE IN WHICH THE  
CHANGES IN STRUCTURE FROM EGG TO ADULT) IS REPEATED OVER AND OVER

RE AND BEHAVIOR (MIGRATION) THE DUCK IS ADAPTED TO ITS ENVIRONMENT.

DRAWING, ETC.) HOW A DUCK IS ADAPTED FOR FLIGHT, HATCHING YOUNG FROM EGGS, AND HOW  
THE LIFE OF THE EMBRYO.

ARE MADE OF CELLS. THEY HAVE A COMPLEX STRUCTURE.

GROW BY CELL DIVISION.

OF CELLS VARIES ACCORDING TO THE FUNCTIONS OF THE CELLS IN THE ORGANISM.

ANCES AS YOU CAN WHEN OBSERVING PLANT AND ANIMAL CELLS UNDER MICROSCOPE.

NAMES CELL STRUCTURES, OR FROM PICTURES OR SLIDES OF LIVING TISSUE, THOSE CELLULAR  
ONLY IN PLANT CELLS, ONLY IN ANIMAL CELLS, OR IN BOTH.

MICROSCOPE, CLASSIFY OBJECTS ON SLIDE AS CELLS OR OBJECTS WHICH ARE NOT CELLS (E.G., AIR

BETWEEN THE MOLD ON BREAD TO THE ACTION OF BACTERIA OF DECAY ON DEAD PLANT AND ANIMAL

CHARACTERISTICS, CLASSIFY COMMON ANIMALS AS BEING EITHER WORMS, INSECTS, SHELLFISH, FISH,  
BIRDS, OR MAMMALS.

S IN WHICH ARE MAMMALS AND BIRDS, PUT ALL WORDS IN CORRECT GROUP AND ADD AT LEAST 2 WORDS

OF ANIMAL HAS A LIFE CYCLE IN WHICH THE SAME PATTERN OF DEVELOPMENT (SUCCESSIVE  
FROM BIRTH TO ADULT) IS REPEATED OVER AND OVER AGAIN.

0204075004 CHOOSE AN ANIMAL, IDENTIFY ITS STRUCTURE AND BEHAVIOR (INBORN A

0204090 CLASSIFY (MATTER)

0204090001 KNOW THAT MATTER IS OF MANY KINDS.

0204090002 RECOGNIZE A SOLID, A LIQUID, AND A GAS ON THE BASIS OF SHAPE.

0204090003 DESCRIBE HOW IT CAN BE SHOWN THAT MATTER HAS WEIGHT.

0204090004 DESCRIBE HOW IT CAN BE SHOWN THAT MATTER TAKES UP SPACE.

0204090005 KNOW THAT MATTER IS NOT ALL MOLECULAR.

0204090006 KNOW THAT A SUBSTANCE MAY BE RECOGNIZED BY ITS PROPERTIES

0204090007 KNOW THAT SUBSTANCES HAVE PROPERTIES THAT DISTINGUISH THEM FROM

0204095 CLASSIFY (PLANTS)

0204095001 GIVEN DESCRIPTION OR EXAMPLE OF A PLANT, CLASSIFY IT INTO ONE OF  
FERNS OR SEED PLANT (INCLUDING PLANTS WITH CONES AND PLANTS WITH

0204105 CLASSIFY (PLANT AND ANIMAL CELLS)

0204105001 DESCRIBE AS MANY DIFFERENCES AS YOU CAN WHEN OBSERVING PLANT AND

ATURE AND BEHAVIOR (INBORN AND LEARNED), AND GIVE ONE EXAMPLE OF EACH,

AS ON THE BASIS OF SHAPE.

TER HAS WEIGHT.

TER TAKES UP SPACE.

R.

IZED BY ITS PROPERTIES.

THAT DISTINGUISH THEM FROM ONE ANOTHER.

ANT, CLASSIFY IT INTO ONE OF THE MAJOR GROUPS: SIMPLE PLANTS, MOSSES,  
S WITH CONES AND PLANTS WITH FLOWERS).

CA N OBSERVING PLANT AND ANIMAL CELLS UNDER THE MICROSCOPE.

0204115

ECOLOGY

0204115001

KNOW THAT ECOLOGY IS THE STUDY OF THE RELATIONSHIP OF LIVING ENVIRONMENT.

0204115002

DO INDEPENDENT RESEARCH TO FIND OUT WHAT ECOLOGY IS AND HOW IT

0204115003

USING THE OVERHEAD PROJECTOR, SHOW THREE AREAS IN WHICH NATURAL

0204115004

TELL, OR DEVISE AN INVESTIGATION TO SHOW HOW RETURNING THE MAT

0204115005

PROVIDED WITH DATE CONCERNING WILDLIFE CONSERVATION IN THE EVE  
SUCH A PROGRAM.

0204125

ENERGY TRANSFORMATION

0204125001

KNOW THAT WHEN ENERGY CHANGES FROM ONE FORM TO ANOTHER, THE TOT

0204130

ENERGY TRANSFORMATION (AIR)

0204130001

KNOW THAT HEATED AIR EXPANDS, COOLED AIR CONTRACTS,

0204130002

DEMONSTRATE THAT WARMED AIR EXPANDS, BY CAUSING A DEFLATE  
OVER A BOTTLE OPENING AND THE BOTTLE IS HEATED.

0204130003

DEMONSTRATE HOW TO COLLECT CLEAN AIR, BY RUBBLING AIR THROUGH  
INVERTED BOTTLE.

0204140

ENERGY TRANSFORMATION (BURNING CANDLE)

0204140001

STATE THAT ENERGY CAN BE CHANGED FROM ONE FORM TO ANOTHER

STUDY OF THE RELATIONSHIP OF LIVING THINGS TO EACH OTHER AND TO THEIR NONLIVING

FIND OUT WHAT ECOLOGY IS AND HOW IT AFFECTS US.

OR, SHOW THREE AREAS IN WHICH NATURAL RESOURCES HAVE BEEN WASTED.

ATION TO SHOW HOW RETURNING THE MATTER TO THE ENVIRONMENT IS HELPFUL.

NG WILDLIFE CONSERVATION IN THE EVERGLADES, ORALLY DESCRIBE A PLAN TO ACCOMPLISH

ES FROM ONE FORM TO ANOTHER, THE TOTAL AMOUNT OF ENERGY REMAINS UNCHANGED.

S, COOLED AIR CONTRACTS.

EXPANDS, BY CAUSING A DEFLATED BALLOON TO INFLATE WHEN THE BALLOON IS PLACED  
THE BOTTLE IS HEATED.

CLEAN AIR, BY BUBBLING AIR THROUGH A PAN OF WATER, DISPLACING WATER FROM AN

ING CANDLE)

ANGED FROM ONE FORM TO ANOTHER (BY DEMONSTRATION OF BURNING CANDLE).

0204140002 WHEN PROVIDED WITH APPROPRIATE MATERIALS TO START A FIRE, OBS  
LEAST ONE PARAGRAPH BASED ON OBSERVATIONS.

0204140003 DESCRIBE THAT A CHEMICAL CHANGE IS OCCURRING AS A CANDLE BURNS, THE  
GIVEN OFF.

0204140004 DEMONSTRATE THAT A CANDLE BURNS AT CONSTANT RATE, BY PLACING HA  
TIME IT TAKES FOR THE PARAFFIN TO DISAPPEAR.

0204140005 DEMONSTRATE THAT CARBON DIOXIDE FORMS WHEN A CANDLE BURNS, BY  
CONTAIN CLEAR LIMEWATER, CAUSING THE LIMEWATER TO TURN CLOUDY WHE

0204145 ENERGY TRANSFORMATION (CARBON DIOXIDE)

0204145001 UNDERSTAND THAT EXHALED AIR CONTAINS CARBON DIOXIDE.

0204145002 SHOW THAT OXYGEN AND CARBON DIOXIDE HAVE DIFFERENT PROPERTIES

0204145003 DESCRIBE THAT CARBON DIOXIDE CAUSES LIMEWATER TO TURN TO A MILKY CO

0204145004 DISTINGUISH BETWEEN AIR FROM HIS LUNGS AND AIR FROM THE ATMOSPHERE  
COMPARING RESULTS WITH A SIMILAR TEST WHERE AIR FROM A BICYCLE PU

0204145005 DEMONSTRATE AND ANSWER QUESTIONS ABOUT THE PROPERTIES OF CARBON  
AND ONE BLOWN UP BY A PERSON.

0204145006 DEMONSTRATE THAT THE AIR FROM LUNGS CONTAINS CARBON DIOXIDE, B  
INTO LIMEWATER.

0204145007 KNOW THAT OXYGEN GIVES ENERGY WHEN IT COMBINES CHEMICALLY

0204150 ENERGY TRANSFORMATION (CHEMICAL)

0204150001 KNOW THAT IN CHEMICAL CHANGE, ATOMS REACT TO PRODUCE A CHANGE IN

IALS TO START A FIRE, OBSERVE THE COMBINED FIRE AND CANDLE AND WRITE AT TIONS.

CCURRING AS A CANDLE BURNS, THE PARAFFIN DISAPPEARS, AND LIGHT AND HEAT ARE

ONSTANT RATE, BY PLACING HALF-INCH MARKS ON THE CANDLE AND MEASURING THE APPEAR.

S WHEN A CANDLE BURNS, BY ARRANGING A CANDLE INSIDE JOINED JARS WHICH LIMEWATER TO TURN CLOUDY WHEN THE LIGHTED CANDLE IS PUT OUT.

E)  
CARBON DIOXIDE.

HAVE DIFFERENT PROPERTIES USING LIMEWATER AS A REAGENT.

LIMEWATER TO TURN TO A MILKY COLOR.

GS AND AIR FROM THE ATMOSPHERE, USING EXHALATION THROUGH LIMEWATER AND T WHERE AIR FROM A BICYCLE PUMP IS USED TO FILL A BALLOON.

UT THE PROPERTIES OF CARBON DIOXIDE BY USING ONE BALLOON FILLED BY A PUMP

CONTAINS CARBON DIOXIDE, BY BLOWING INTO A BALLOON AND BUBBLING THE AIR

T COMBINES CHEMICALLY WITH CARBON.

0204160 ENERGY TRANSFORMATION (COMPOUNDS)

0204160001 KNOW THAT A COMPOUND IS MADE UP OF MORE THAN ONE ELEMENT

0204160002 COMBINE TWO COMPOUNDS WITH DIFFERENT PROPERTIES IN ORDER TO CRE

0204170 ENERGY TRANSFORMATION (CONDENSATION)

0204170001 KNOW THAT WATER VAPOR IN THE AIR CAN BE CHANGED TO WATER.

0204170002 KNOW THAT TO CONDENSE WATER VAPOR, HEAT ENERGY MUST BE TAKEN.

0204170003 KNOW THAT WATER VAPOR CONDENSES WHEN COOLED.

0204170004 DEMONSTRATE THAT WATER IS IN THE AIR, BY CAUSING MOISTURE  
WITH ICE WATER.

0204170005 DEMONSTRATE THAT WATER VAPOR IS FORMED INSIDE AND AT THE TOP OF  
AIR, WHEN THE GLASS CHAMBER IS PLACED IN A WARM LOCATION.

0204180 ENERGY TRANSFORMATION (DECOMPOSITION)

0204180001 KNOW THAT THROUGH THE ACTION OF BACTERIA AND OTHER ORGANISMS  
TO THE ENVIRONMENT.

0204180002 EXPLAIN HOW BACTERIA AND FUNGI BREAK DOWN ONCE LIVING THINGS

0204190 ENERGY TRANSFORMATION (ELEMENTS)

0204190001 KNOW THAT AN ELEMENT IS MADE UP OF ONE KIND OF ATOM.

OF MORE THAN ONE ELEMENT.

RENT PROPERTIES IN ORDER TO CREATE A THIRD COMPOUND WITH NEW PROPERTIES.

ION)

CAN BE CHANGED TO WATER.

OR, HEAT ENERGY MUST BE TAKEN AWAY.

WHEN COOLED.

AIR, BY CAUSING MOISTURE TO COLLECT ON THE SURFACE OF A SHINY CAN FILLED

FORMED INSIDE AND AT THE TOP OF A SEALED GLASS CHAMBER THAT CONTAINS WATER AND  
PLACED IN A WARM LOCATION.

TION)

BACTERIA AND OTHER ORGANISMS, THE MATTER OF ONCE-LIVING THINGS IS RETURNED

REAK DOWN ONCE LIVING THINGS AND RETURN THEM TO THE ENVIRONMENT.

OF ONE KIND OF ATOM.

0204190002 KNOW THAT THE ATOMS IN AN ELEMENT ARE ALIKE. THE ATOMS IN A COMPOUND

0204190003 STATE THE DIFFERENCES IN ELEMENTS AND COMPOUNDS.

0204195 ENERGY TRANSFORMATION (EVAPORATION)

0204195001 KNOW THAT WATER EVAPORATES TO BECOME A GAS, WATER VAPOR.

0204195002 UNDERSTAND HOW EVAPORATION IS EXPLAINED BY THE MOLECULAR THEORY.

0204195003 DESCRIBE HOW A DROP OF WATER EVAPORATES AS IT CHANGES FROM LIQUID

0204210 ENERGY TRANSFORMATION (HEAT)

0204210001 DESCRIBE THE STATE TO WHICH MATTER WILL CHANGE IF HEAT ENERGY IS  
CONTRACT.

0204210002 GIVEN TWO STATES OF MATTER, TELL IF HEAT MUST BE ADDED OR TAKEN  
AND GIVE THE NAME OF THE PROCESS.

0204210003 GIVEN DESCRIPTION OR ILLUSTRATION OF A CHANGE OF STATE OF LIQUID  
FREEZING POINT OR IF IT WAS AT BOILING POINT.

0204225 ENERGY TRANSFORMATION (LIGHT AND SOUND)

0204225001 STATE THE DIFFERENCES IN LIGHT AND SOUND AS FORMS OF ENERGY.

ELEMENT ARE ALIKE. THE ATOMS IN A COMPOUND ARE DIFFERENT.

ELEMENTS AND COMPOUNDS.

ORATION)

TO BECOME A GAS, WATER VAPOR.

IS EXPLAINED BY THE MOLECULAR THEORY.

R EVAPORATES AS IT CHANGES FROM LIQUID TO WATER VAPOR, DUE TO A TEMPERATURE CHANGE.

MATTER WILL CHANGE IF HEAT ENERGY IS ADDED OR TAKEN AWAY, USING THE TERMS EXPAND OR

TELL IF HEAT MUST BE ADDED OR TAKEN AWAY TO GO FROM THE FIRST TO THE SECOND STATE  
PROCESS.

ATION OF A CHANGE OF STATE OF LIQUID, EXPLAIN IF TEMPERATURE OF SUBSTANCE WAS AT  
AT BOILING POINT.

T AND SOUND)

IGHT AND SOUND AS FORMS OF ENERGY.

0204245	ENERGY TRANSFORMATION (MOLECULAR)	
0204245001	KNOW THAT MATTER IS MOLECULAR IN NATURE.	
0204245002	KNOW THAT THE SPACE BETWEEN MOLECULES INCREASES AS A	SUBSTANCE
0204245003	KNOW THAT MOLECULES CAN BE MOVED AROUND TO FORM	COMPOUNDS
0204245004	KNOW THAT ENERGY IS RELEASED DURING A MOLECULAR CHANGE.	
0204245005	KNOW THAT A LOSS OR GAIN OF ENERGY AFFECTS MOLECULAR	MOTION.
0204245006	KNOW THAT A LOSS OR GAIN IN ENERGY AFFECTS MOLECULAR	MOTION.
0204245007	KNOW THAT MOLECULES OF SUBSTANCES INTERACT.	
0204245008	KNOW THAT AIR AND WATER CANNOT OCCUPY THE SAME SPACE AT	THE SAME
0204245009	THROUGH THE USE OF MODELS, DISCOVER THAT DIFFERENT	COMPOUNDS
	MOLECULES.	
0204255	ENERGY TRANSFORMATION (OXIDATION)	
0204255001	NAME THE BLACK SUBSTANCE AS CARBON AND THE LIQUID AS	WATER IN
0204255002	DEMONSTRATE THAT A BLACK SUBSTANCE AND A LIQUID ARE	FORMED WH
0204255003	KNOW THAT IRON AND OXYGEN COMBINE TO FORM IRON OXIDE, OR RUST.	
0204255004	KNOW THAT OXYGEN RUSTS IRON MORE QUICKLY THAN AIR DOES.	

ECULAR)

AR IN NATURE.

N MOLECULES INCREASES AS A SUBSTANCE EXPANDS.

MOVED AROUND TO FORM COMPOUNDS OR TO OBTAIN ELEMENTS.

ED DURING A MOLECULAR CHANGE.

R ENERGY AFFECTS MOLECULAR MOTION.

N ENERGY AFFECTS MOLECULAR MOTION.

STANCES INTERACT.

NNOT OCCUPY THE SAME SPACE AT THE SAME TIME.

DISCOVER THAT DIFFERENT COMPOUNDS HAVE DIFFERENT NUMBERS OF ATOMS IN THEIR

DATION)

S CARBON AND THE LIQUID AS WATER IN THE HEATING OF SUGAR OVER A FLAME.

SUBSTANCE AND A LIQUID ARE FORMED WHEN SUGAR IN A TEST TUBE IS HEATED OVER A FLAME

COMBINE TO FORM IRON OXIDE, OR RUST.

N MORE QUICKLY THAN AIR DOES.

0204255005. KNOW THAT SOME MOLECULES OF AIR SEEM TO DISAPPEAR WHEN IRON RUSTS.

0204255006 DEMONSTRATE AS IRON RUSTS, THE AIR IN A CLOSED CONTAINER IS DIMINISHED

0204255007 DEMONSTRATE THAT, INSIDE A TEST TUBE CONTAINING WET STEEL WOOL IN  
AS THE STEEL WOOL RUSTS.

0204260 ENERGY TRANSFORMATION (OXYGEN)

0204260001 KNOW THAT OXYGEN AND CARBON DIOXIDE FORM A CYCLE.

0204260002 STATE THE FIVE IMPORTANT FACTS ABOUT THE OXYGEN CYCLE.

0204260003 NAME BUBBLES OF GAS, FROM AQUARIUM PLANTS, AS OXYGEN.

0204260004 DESCRIBE THAT BUBBLES RISE FROM AQUARIUM PLANTS GROWING IN SUNLIGHT,  
LIGHT IS CUT OFF.

0204260005 DEMONSTRATE THE COLLECTION OF OXYGEN BY ADDING HYDROGEN PEROXIDE TO A  
TEST TUBE IN WATER, CAUSING GAS TO FORM IN THE TEST TUBE, DISPLAC

0204285 ENERGY TRANSFORMATION (WATER)

0204285001 KNOW THAT FREEZING WATER EXPANDS.

0204285002 KNOW THAT THE EXPANSION OF WATER AS IT TURNS TO ICE HAS A GREAT FORCE

0204285003 DEMONSTRATE THAT AS WATER FREEZES IT EXPANDS AND TAKES UP MORE SPACE  
CAUSING ICE TO RISE ABOVE TOP OF CAN.

0204285004 KNOW THAT ICE OCCUPIES A GREATER VOLUME THAN WATER.

SEEM TO DISAPPEAR WHEN IRON RUSTS.

IR IN A CLOSED CONTAINER IS DIMINISHED.

TUBE CONTAINING WET STEEL WOOL INVERTED IN WATER, THE WATER LINE WILL RISE

IDE FORM A CYCLE.

ABOUT THE OXYGEN CYCLE.

UM PLANTS, AS OXYGEN.

AQUARIUM PLANTS GROWING IN SUNLIGHT, AND THAT THE BUBBLES DECREASE WHEN THE

OXYGEN BY ADDING HYDROGEN PEROXIDE TO A TEST TUBE CONTAINING YEAST, INVERTING THE  
TO FORM IN THE TEST TUBE, DISPLACING THE WATER.

AS IT TURNS TO ICE HAS A GREAT FORCE.

IT EXPANDS AND TAKES UP MORE SPACE BY FREEZING WATER IN OPEN CAN. THUS

ERIC  
VOLUME THAN WATER.

0204285005	KNOW THAT WARM WATER RISES IN COLD WATER	COLD WATER;	SINKS IN
0204285006	KNOW THAT WARM WATER RISES BECAUSE IT EXPANDS...		
0204285007	DEMONSTRATE THAT WARM WATER RISES AND COLD WATER SINKS.		
0204285008	DEMONSTRATE THAT WARM WATER RISES WHEN MIXED WITH COLD	WATER, BY	
	COLD WATER, CAUSING THE COLORED WATER TO REMAIN IN THE	TOP HALF	
0204285009	DEMONSTRATE THAT COLD WATER SINKS WHEN MIXED WITH WARM	WATER, BY	
	WARM WATER, CAUSING THE COLORED WATER TO SETTLE IN THE	BOTTOM HA	
0204285010	DEMONSTRATE THAT A DROP OF WATER DISAPPEARS AND CAN BE	FORMED AG	
	CHAMBER AND ALTERNATELY PLACING THE CONTAINER IN A	WARM, THE	
0204285011	KNOW THAT WATER BECOMES AN INVISIBLE GAS WHEN SUPER	HEATED AN	

0204290      EROSION

0204290001      DEFINE EROSION. NAME AND DESCRIBE THREE WAYS IT CAN OCCUR.

0204290002      DEMONSTRATE HOW WATER MOVES LAND BY SPRINKLING WATER ON SAND HILL

0204290003      DEMONSTRATE THAT MOVING WATER CAN CARRY SAND PARTICLES BY STIRRIN  
CAUSING SAND PARTICLES TO RISE INTO SWIRLING WATER.

0204290004      DEMONSTRATE THAT FASTER MOVING WATER CARRIES MORE SAND PARTICLES  
WHICH WATER IS STIRRED.

0204290005      KNOW HOW PLANTS REDUCE EROSION.

ES IN COLD WATER COLD WATER; SINKS IN WARM WATER.

IS BECAUSE IT EXPANDS...

ER RISES AND COLD WATER SINKS.

ER RISES WHEN MIXED WITH COLD WATER, BY POURING COLORED WARM WATER INTO A GLASS OF COLORED WATER TO REMAIN IN THE TOP HALF OF THE JAR.

ER SINKS WHEN MIXED WITH WARM WATER, BY POURING COLORED COLD WATER INTO A GLASS OF COLORED WATER TO SETTLE IN THE BOTTOM HALF OF THE JAR.

OF WATER DISAPPEARS AND CAN BE FORMED AGAIN, BY ENCLOSING THE DROP IN A CLOSED GLASS PLACING THE CONTAINER IN A WARM, THEN COOL PLACE.

AN INVISIBLE GAS WHEN SUPER HEATED AND RETURNS TO A LIQUID WHEN COOLED.

TO DESCRIBE THREE WAYS IT CAN OCCUR.

VES LAND BY SPRINKLING WATER ON SAND HILL CAUSING SAND TO FLOW DOWN GROOVE AS IN RIVER.

WATER CAN CARRY SAND PARTICLES BY STIRRING WATER IN JAR CONTAINING SAND AT BOTTOM TO RISE INTO SWIRLING WATER,

MOVING WATER CARRIES MORE SAND PARTICLES THAN SLOWER MOVING WATER BY VARYING SPEED WITH

ROSION.

0204295 FISH

0204295001 INVESTIGATE THE STRUCTURES THAT ADAPT A FISH FOR WATER LIVING.

0204295002 DESCRIBE HOW LIVING FISH IS FITTED FOR MOVING THROUGH WATER,  
CHARACTERISTICS AND ITS MOTIONS.

0204295003 DRAW AND LABEL THE FOOD CHAIN OF A SALMON.

0204295004 UNDERSTAND THE SALMON LIFE CYCLE IN WHICH THEY TRAVEL GREAT D  
SPAWNING GROUNDS IN FRESH WATER.

0204295 05 KNOW THAT THE LIFE CYCLE OF A SALMON IS REPEATED AS THE EGGS HA  
TO DEVELOP INTO ADULT SALMON.

0204295006 KNOW HOW THE SALMON'S LIFE CYCLE IS REPEATED OVER AND OVER.

0204295007 WRITE OR TELL THE STORY OF A SALMON'S LIFE CYCLE USING THE COR

0204300 FORCE AND MOTION

0204300001 DEMONSTRATE YOUR UNDERSTANDING OF THE TERM FORCE AND APPLY  
A PULL IS EXERTED ON AN OBJECT.

0204300002 DESIGN A SIMPLE EXPERIMENT WHICH DEMONSTRATES THE APPLICA  
INERTIA).

0204315 GEOLOGY

0204315001 KNOW THAT THE ENVIRONMENT IS IN CONST. CHANGE.

0204315002 KNOW THAT THE EARTH'S SURFACE IS ALWAYS CHANGING.

0204315003 UNDERSTAND HOW THE ENERGY OF MOVING WATER CHANGES THE EARTH'S

ADAPT A FISH FOR WATER LIVING.

ATED FOR MOVING THROUGH WATER, BY OBSERVING AND RECORDING THE FISH'S

OF A SALMON.

LE IN WHICH THEY TRAVEL GREAT DISTANCES FROM FEEDING GROUNDS IN SALT WATER TO

SALMON IS REPEATED AS THE EGGS HATCH AND THE SALMON YOUNG RETURNED TO SALT WATER

LE IS REPEATED OVER AND OVER.

SALMON'S LIFE CYCLE USING THE CORRECT NAMES FOR EACH PHASE.

OF THE TERM FORCE AND APPLY THE TERM IN DESCRIBING SITUATIONS WHERE A PUSH OR

CH DEMONSTRATES THE APPLICATION OF NEWTON'S FIRST LAW OF MOTION (LAW OF

W CONSTANT CHANGE.

IS ALWAYS CHANGING.

MOVING WATER CHANGES THE EARTH'S SURFACE.

0204315004	KNOW HOW LAND WORN DOWN IN ONE PLACE IS BUILT UP IN	ANOTHER.
0204315005	KNOW HOW PRESSURES ON AND IN THE EARTH CAUSE MOUNTAINS	TO RISE.
0204315006	KNOW HOW THE PRESSURE OF SEDIMENT MAY CAUSE MOUNTAINS	TO RISE.
0204315007	EXPLAIN HOW THE WEIGHT OF SEDIMENT CAN HELP TO RAISE	MOUNTAINS.
0204315008	KNOW THAT THE PRESSURE ON THE MOLTEN ROCK WITHIN THE	EARTH CAUS
0204315009	KNOW HOW UNEQUAL EXPANSION AND CONTRACTION CAN BREAK	ROCKS.
0204315010	USING MARBLES SHOW HOW EXPANSION AND CONTRACTION WITH	HEAT AND C
0204315011	SHOW HOW FREEZING WATER EXPANDS WITH ENOUGH FORCE TO	BREAK ROCK
0204315012	KNOW THAT THE EXPANSION AND THE CONTRACTION OF ROCK, AND AND THE FO	
0204315013	KNOW HOW THE EXPANSION OF FREEZING WATER BREAKS DOWN	ROCKS.
0204315014	GIVEN MODEL OR DIAGRAM OF THE EARTH, NAME EACH OF THE	THREE LAYE
	GENERAL PROPERTIES OF EACH.	
0204315015	KNOW WHY THE EARTH'S ROCKS DEEP BELOW THE CRUST CAN	FLOW UNDER
0204315016	GIVEN A DESCRIPTION OF HOW A ROCK WAS FORMED, TELL	WHETHER TH
	METAMORPHIC.	

NE PLACE IS BUILT UP IN ANOTHER.

THE EARTH CAUSE MOUNTAINS TO RISE.

IMENT MAY CAUSE MOUNTAINS TO RISE.

IMENT CAN HELP TO RAISE MOUNTAINS.

E MOLTEN ROCK WITHIN THE EARTH CAUSES THE CRUST TO RISE FORMING MOUNTAINS.

ND CONTRACTION CAN BREAK ROCKS.

SION AND CONTRACTION WITH HEAT AND COLD CAN BREAK DOWN ROCK.

DS WITH ENOUGH FORCE TO BREAK ROCK, USING CAN, WATER AND BRICK.

HE CONTRACTION OF ROCK, AND AND THE FORCE OF GROWING PLANTS, HELP, BREAK DOWN ROCK.

EFZING WATER BREAKS DOWN ROCKS.

E EARTH, NAME EACH OF THE THREE LAYERS (CRUST, MANTLE, AND CORE) AND DESCRIBE

EEP BELOW THE CRUST CAN FLOW UNDER PRESSURE.

ROCK WAS FORMED, TELL WHETHER THE ROCK IS IGNEOUS, SEDIMENTARY, OR

0204325 HUMAN BODY (CIRCULATORY)

0204325001 USING THE TERMS ARTERIES, VEINS, CAPILLARIES, AND HEART, DESCRIBE H

0204335 HUMAN BODY (DIET)

0204335001 TELL WHY WE NEED NUTRIENTS AND HOW THEY DIFFER FROM WASTES.

0204335002 CONDUCT TESTS TO FIND OUT WHETHER A FOOD IS MAINLY CARBOHYDRA

0204335003 CLASSIFY A FAMILIAR FOOD AS BELONGING TO ONE OF THE FOLLOWING  
VEGETABLE=FRUIT.

0204335004 FROM LIST OF FOODS, IDENTIFY BEST SOURCES OF PROTEIN, CARBOHYDRA

0204335005 EXPLAIN WHETHER FOOD EATEN IN ONE DAY BY A CHILD IS A BALANCED D

0204335006 PLAN A WELL-BALANCED DIET FOR A DAY.

0204340 HUMAN BODY (DIGESTIVE)

0204340001 ON DRAWING OF DIGESTIVE SYSTEM, IDENTIFY MOUTH, TEETH, TONGUE, FO

0204355 HUMAN BODY (EXERCISE)

0204355001 SUGGEST SCHEDULE OF EXERCISES FOR ADULT TO DO TO REMAIN HEALTHY.

VEINS, CAPILLARIES, AND HEART, DESCRIBE HOW THE BLOOD TRAVELS IN THE BODY,

AND HOW THEY DIFFER FROM WASTES.

WHETHER A FOOD IS MAINLY CARBOHYDRATE, FAT, OR PROTEIN.

BELONGING TO ONE OF THE FOLLOWING FOOD GROUPS: MILK, MEAT, BREAD-CEREAL, OR

THE BEST SOURCES OF PROTEIN, CARBOHYDRATE, AND FAT.

IN ONE DAY BY A CHILD IS A BALANCED DIET. IF NOT, TELL WHAT IS MISSING.

OR A DAY.

ITEM, IDENTIFY MOUTH, TEETH, TONGUE, FOOD PIPE, STOMACH, AND INTESTINE.

THINGS FOR ADULT TO DO TO REMAIN HEALTHY.

0204385	HUMAN BODY (MUSCULAR)	
0204385001	EXPLAIN HOW OPPOSING MUSCLES IN MAN (INCLUDING THOSE OF	ARM AND LE
0204400	HUMAN BODY (POSTURE)	
0204400001	NAME TWO HEALTH REASONS FOR GOOD POSTURE AND TELL IF A	PERSON IS,
	AND SITTING.	
0204410	HUMAN BODY (RESPIRATORY)	
0204410001	DESCRIBE NORMAL FLOW OF AIR IN AND OUT OF HUMAN	RESPIRATOR
	PASSAGE, AND WINDPIPE.	
0204415	HUMAN BODY (SKELETAL)	
0204415001	IN DRAWING, IDENTIFY SKULL, BACKBONE, RIRS. SHOULDER	BLADE, UPP
	THIGHBONE, KNEECAP, SHINBONE, HEEL BONE, TOE AND FINGER	BONES.
0204420	HUMAN BODY (SKIN, HAIR, TEETH, NAILS)	
0204420001	DESCRIBE HOW TO TAKE PROPER CARE OF SKIN, TEETH, HAIR,	AND NAILS.
	GOOD HEALTH.	
0204425	HUMAN BODY (SYSTEMS)	
0204425001	IN A DRAWING OF HUMAN BODY, FIND AND NAME FIVE SYSTEMS	OF THE BODY
0204425002	MATCH HUMAN BODY SYSTEMS (SKELETAL, MUSCULAR, DIGESTIVE, CIRCULATORY	

MUSCLES IN MAN (INCLUDING THOSE OF ARM AND LEG) WORK TO CAUSE MOVEMENT OF BODY PARTS.

FOR GOOD POSTURE AND TELL IF A PERSON IS SHOWING PROPER POSTURE IN STANDING, WALKING,

AIR IN AND OUT OF HUMAN RESPIRATORY SYSTEM, USING THE TERMS LUNGS, NOSE, NASAL

HULL, BACKBONE, RIBS, SHOULDER BLADE, UPPER ARM BONE, LOWER ARM BONES, HIPBONE,  
 BONE, HEEL BONE, TOE AND FINGER BONES.

TEETH, NAILS)

PROPER CARE OF SKIN, TEETH, HAIR, AND NAILS. NAME TWO REASONS WHY THIS IS IMPORTANT FOR

BODY, FIND AND NAME FIVE SYSTEMS OF THE BODY.

(SKELETAL, MUSCULAR, DIGESTIVE, CIRCULATORY, AND RESPIRATORY) TO THEIR MAJOR FUNCTIONS.

0204445        INSECTS

0204445001     RECOGNIZE THE BODY PARTS OF AN INSECT YOU CHOOSE TO        STUDY.

0204450        INTERDEPENDENCE

0204450001     KNOW HOW LIVING THINGS DEPEND ON OTHER LIVING THINGS        FOR THEI  
GREEN PLANTS.

0204450002     KNOW THE INHERITED CHARACTERISTICS OF A LIVING THING        CAN DEVE  
GROWING PLANT OR ANIMAL CAN INTERCHANGE MATTER AND        ENERGY W

0204450003     INFER OR DEMONSTRATE WAYS IN WHICH PLANTS AND ANIMALS        MAY BE I  
GREEN PLANTS OR THEIR PRODUCTS FOR FOOD.

0204455        LIGHT

0204455001     KNOW THAT LIGHT AND SOUND ARE DIFFERENT FORMS OF ENERGY.

0204455002     DEMONSTRATE HOW WE KNOW THAT LIGHT IS A FORM OF ENERGY.

0204455003     KNOW THAT THE LIGHT ENERGY OF A CANDLE COMES FROM        PARAFFIN

0204455004     ~~KNOW~~ THAT LIGHT ENERGY MAY BE RELEASED BY A CHEMICAL        CHANGE.

0204455005     KNOW THAT CHEMICAL ENERGY CAN BECOME LIGHT ENERGY.

0204455006     KNOW THAT THE LIGHT ENERGY OF A CANDLE IS PRODUCED BY        CHEMICAL

0204455007     KNOW THAT LIGHT TRAVELS THROUGH SPACE.

0204455008     KNOW THAT OBJECTS BECOME VISIBLE AS LIGHT IS REFLECTED        FROM THE

CT YOU CHOOSE TO STUDY.

HER LIVING THINGS FOR THEIR FOOD, IN FOOD CHAINS THAT IN THE END DEPEND (

OF A LIVING THING CAN DEVELOP ONLY IN THE KIND OF ENVIRONMENT IN WHICH TH  
CHANGE MATTER AND ENERGY WITH THE ENVIRONMENT.

PLANTS AND ANIMALS MAY BE INTERDEPENDENT. NONGREEN PLANTS ARE DEPENDENT (

FOOD.

RENT FORMS OF ENERGY.

IS A FORM OF ENERGY.

OLE COMES FROM PARAFFIN.

SED BY A CHEMICAL CHANGE.

E LIGHT ENERGY.

OLE IS PRODUCED BY CHEMICAL CHANGE.

CE.

LIGHT IS REFLECTED FROM THEM TO THE EYE.

0204455009 KNOW THAT LIGHT MUST REACH THE EYE TO BE SEEN.

0204455010 DEMONSTRATE THAT LIGHT TRAVELS IN A STRAIGHT LINE.

0204455011 OBSERVE THE BEHAVIOR OF LIGHT.

0204455012 KNOW THAT LIGHT ENERGY BEHAVES SOMETIMES AS WAVES, AND SOMETIMES

0204455013 KNOW THAT LIGHT CAN BE POLARIZED BY CERTAIN MATERIALS.

0204455014 KNOW THAT LIGHT MAY BE BENT AS IT PASSES THROUGH CERTAIN MATERIALS.

0204455015 DEMONSTRATE THAT LIGHT MAY BE BENT (REFRACTED) AS IT ENTERS OR

0204455016 DEMONSTRATE HOW LIGHT CAN BE ABSORBED AND REFLECTED.

0204455017 DEMONSTRATE THAT LIGHT BOUNCES, BY USING A LIGHT SOURCE, MIRROR, WH  
AMOUNTS OF LIGHT TO REFLECT ONTO A DARKENED OBJECT.

0204455018 DESIGN EXPERIMENT TO SHOW WHETHER SUBSTANCES OR OBJECTS WITH DIFFE  
ABSORB MOST OF THE LIGHT WHICH FALLS ON THEM.

0204455019 DESCRIBE THE BEHAVIOR OF LIGHT IN TERMS OF REFLECTION OF BRIGHT

0204455020 DEMONSTRATE THAT LIGHT CAN BE REFLECTED, ABSORBED, DIFFUSED,

0204455021 DEMONSTRATE THAT THE BEHAVIOR OF POLARIZED LIGHT IS EXPLAINED

0204455022 DEMONSTRATE THAT LIGHT PASSES THROUGH ONE PIECE OF POLARIZED  
WHEN TWO PIECES ARE USED AND ONE IS TURNED.

THE EYE TO BE SEEN.

VELS IN A STRAIGHT LINE.

GHT.

AVES SOMETIMES AS WAVES, AND SOMETIMES AS PARTICLES.

ARIZED BY CERTAIN MATERIALS.

T AS IT PASSES THROUGH CERTAIN MATERIALS.

BE BENT (REFRACTED) AS IT ENTERS OR LEAVES WATER.

BE ABSORBED AND REFLECTED.

UNCES, BY USING A LIGHT SOURCE, MIRROR, WHITE PAPER, AND BLACK PAPER, CAUSING VARYING  
CT ONTO A DARKENED OBJECT.

WHETHER SUBSTANCES OR OBJECTS WITH DIFFERENT SURFACE TEXTURES AND COLORS REFLECT OR  
WHICH FALLS ON THEM.

LIGHT IN TERMS OF REFLECTION OF BRIGHT SURFACES AND ITS ABSORPTION BY DARK SURFACES.

N BE REFLECTED, ABSORBED, DIFFUSED, AND BENT.

VIOR OF POLARIZED LIGHT IS EXPLAINED BY A WAVE MODEL.

ASSES THROUGH ONE PIECE OF POLARIZED PLASTIC, BUT ALTERNATELY STOPS AND PASSES  
AND ONE IS TURNED.

0204455023 CONSTRUCT A DRAWING OF LIGHT RAYS PASSING THROUGH A LENS TO THE  
TO A POINT.

0204455024 DESCRIBE THE LENS AS FOCUSING THE LIGHT WHEN IT BRINGS LIGHT

0204455025 DEMONSTRATE THAT LIGHT RAYS BEND, BY CAUSING SUNLIGHT TO PASS  
IT MAY BE HOT ENOUGH TO BURN PAPER.

0204465 MACHINES (COMPLEX)

0204465001 DISASSEMBLE A COMPLEX MACHINE AND IDENTIFY AT LEAST TWO OF THE

0204465002 DISASSEMBLE A COMPLEX MACHINE AND DESCRIBE ORALLY AT LEAST

0204470 MACHINES (SIMPLE)

0204470001 WHEN GIVEN THREE SIMPLE MACHINES, IDENTIFY AND DESCRIBE THE OPERATION

0204470002 DESIGN A SIMPLE TOOL WHICH WILL HELP YOU PERFORM A TASK AT SCHOOL

0204495 MICRO-ORGANISMS

0204495001 DEMONSTRATE FOOD IS NECESSARY FOR ORGANISMS TO GROW AND MULTIPLY  
HARD-BOILED EGG YOLK CAUSING JARS WITH FOOD TO BE CLOUDY WITH MICRO-ORGANISMS

0204505 MOLLUSKS

0204505001 DESCRIBE THE HATCHING OF AN EGG, BY OBSERVING AND RECORDING  
SNAILS HATCH.

AYS PASSING THROUGH A LENS TO THE PAPER, ILLUSTRATING THAT THE RAYS BEND AND FOCU.

THE LIGHT WHEN IT BRINGS LIGHT TO A POINT.

ND, BY CAUSING SUNLIGHT TO PASS THROUGH A CONVEX LENS AND FORM A SMALL SPOT WHERE  
APER.

AND IDENTIFY AT LEAST TWO OF THE SIMPLE MACHINES INVOLVED.

AND DESCRIBE ORALLY AT LEAST TWO OF THE SIMPLE MACHINES INVOLVED.

ES, IDENTIFY AND DESCRIBE THE OPERATION OF ONE MACHINE.

HELP YOU PERFORM A TASK AT SCHOOL OR AT HOME.

FOR ORGANISMS TO GROW AND MULTIPLY BY CULTURING POND WATER WITH/WITHOUT ADDING  
ARS WITH FOOD TO BE CLOUDY WITH MICRO-ORGANISMS.

0204510 PLANTS (ADAPTATION)

0204510001 KNOW THAT DIFFERENT PLANTS ARE ADAPTED TO DIFFERENT ENVIR

0204510002 DEMONSTRATE HOW NONGREEN PLANTS ARE ADAPTED FOR OBTAIN

0204530 PLANTS (FERTILIZATION)

0204530001 DESCRIBE ORALLY OR IN WRITING HOW FERTILIZATION TAKES PLACE

0204535 PLANTS (FOOD CHAINS)

0204535001 KNOW THAT FOOD CHAINS LEAD ULTIMATELY TO GREEN PLANTS.

0204540 PLANTS (GASES)

0204540001 KNOW THAT GREEN PLANTS GIVE OFF OXYGEN GAS.

0204540002 KNOW THAT THE SUBSTANCES IN THE AIR ARE AFFECTED BY THE ACTION  
IN LIGHT, AND TAKE IN CARBON DIOXIDE).

0204545 PLANTS (GROWTH)

0204545001 KNOW HOW GROWING PLANTS CAN BREAK ROCKS.

0204545002 KNOW HOW MATTER FROM THE ENVIRONMENT IS USED FOR GROWTH BY CE

0204545003 KNOW THAT PLANTS HAVE LIFE CYCLES ADAPTED TO GROWTH IN THEIR

PLANTS ARE ADAPTED TO DIFFERENT ENVIRONMENTS.

GREEN PLANTS ARE ADAPTED FOR OBTAINING FOOD AND REPRODUCING.

WRITING HOW FERTILIZATION TAKES PLACE IN THE PLANT.

LEAD ULTIMATELY TO GREEN PLANTS.

S GIVE OFF OXYGEN GAS.

ANCES IN THE AIR ARE AFFECTED BY THE ACTION OF GREEN PLANTS. (GREEN PLANTS GIVE OFF OXYGEN CARBON DIOXIDE).

TS CAN BREAK ROCKS.

THE ENVIRONMENT IS USED FOR GROWTH BY CELLS OF GREEN PLANTS AND ALL OTHER LIVING THINGS.

LIFE CYCLES ADAPTED TO GROWTH IN THEIR ENVIRONMENTS.

0204545004 CONSTRUCT A HYPOTHESIS ABOUT WHAT WILL HAPPEN TO THE HEIGHT  
CONTINUES GROWING.

0204545005 DEMONSTRATE THAT THE HEIGHT OF THE MARK WILL NOT CHANGE AS T

0204550 PLANTS (HYBRIDS)

0204550001 DEBATE FOR OR AGAINST SPENDING TIME AND MONEY TO IMPROVE THE  
HYBRIDIZATION.

0204555 PLANTS (MOLDS)

0204555001 WHEN GIVEN THE APPROPRIATE MATERIAL UNDER CONTROLLED COND  
GROW SUCCESSFULLY UNDER CONTROLLED CONDITIONS.

0204555002 DEMONSTRATE THAT MOLD WILL GROW ON FOOD, PLACING MOIST  
PLACE FOR A FEW DAYS.

0204555003 DESCRIBE THE GROWTH OF THE MOLD ON BREAD AS SIMILAR TO WHICH  
CELLS TO DISAPPEAR IN TIME.

0204560 PLANTS (NEEDS)

0204560001 KNOW WHY GREEN PLANTS NEED THE RIGHT CONDITIONS FOR GROWT

0204560002 WHEN GIVEN FIVE SEEDS, GROW AND OBSERVE ENVIRONMENTAL CONDI

0204560003 DEMONSTRATE THAT LIGHT IS NECESSARY FOR GROWTH OF A GREEN  
SUNLIGHT, TO LIGHT FROM AN ELECTRIC LAMP, AND TO DARKN

0204560004 DEMONSTRATE THE CONDITIONS UNDER WHICH GREEN PLANTS WILL  
CONDITIONS OF SOIL, WATER AND LIGHT AND COMPARING RESUL

WHAT WILL HAPPEN TO THE HEIGHT OF A MARK ON A GROWING PLANT STEM, AS THE PLANT GROWS?  
 THE MARK WILL NOT CHANGE AS THE PLANT CONTINUES GROWING.

TIME AND MONEY TO IMPROVE THE QUANTITY AND THE QUALITY OF CROPS BY SELECTION OR

EXPERIMENTAL UNDER CONTROLLED CONDITIONS.  
 CONDUCTION, CONDUCT AN EXPERIMENT TO SHOW MOLDS WILL GROW ON FOOD, PLACING MOISTENED STALE BREAD IN A COVERED JAR AND IN A WARM PLACE. WHICH FUNGI WOULD GROW ON A DEAD TREE, CAUSING THE TREE TO ROT?

RIGHT CONDITIONS FOR GROWTH.  
 OBSERVE ENVIRONMENTAL CONDITIONS OF AT LEAST ONE PLANT.

FACTORS AFFECTING GROWTH OF A GREEN PLANT BY SUBJECTING GROWING RADISH SEEDLINGS TO LIGHT AND DARKNESS, CAUSING MOST TO LEAST GROWTH.

1. WHICH GREEN PLANTS WILL GROW BEST, BY GROWING SEEDS UNDER EIGHT DIFFERENT CONDITIONS? COMPARING RESULTS.

- 0204560005 KNOW THAT GREEN PLANTS GET THE MATTER FOR GROWTH FROM WATER,
- 0204560006 DESCRIBE THAT LIGHT IS THE SOURCE OF ENERGY FOR GROWING GREEN P
- 0204560007 CONTROL THE ENVIRONMENT OF A GROWING PLANT AND OBSERVE WHAT HA  
CHANGED.
- 0204560008 CONSTRUCT THREE TESTS OF GROWING CONDITIONS.
- 0204560009 STATE THREE THINGS NECESSARY FOR A GROWING LAND PLANT.
- 0204560010 KNOW THAT MINERALS IMPORTANT FOR PLANT GROWTH ARE FOUND IN SOIL
- 0204560011 KNOW THAT USING ENERGY FROM LIGHT, GREEN PLANTS MAKE THEIR O  
ENVIRONMENT.
- 0204560012 DEMONSTRATE THAT THE AMOUNT AND KIND OF LIGHT ENERGY RECEIVE  
FOOD AND GROW.
- 0204560013 UNDERSTAND HOW THE ACTION OF DECAY RETURNS TO THE SOIL COMPOUN
- 0204560014 DEMONSTRATE WAYS IN WHICH A GREEN PLANT MAY BE DEPENDENT UPON AN
- 0204560015 DEMONSTRATE, IN A MULTIPLE CHOICE TEST, KNOWLEDGE OF PLANTS  
AND PROTEINS.
- 0204570 PLANTS (PARTS)
- 0204570001 MAKE MODELS AND DIAGRAMS OF DIFFERENT PLANT STRUCTURES, BASING  
ACTUAL PLANTS.
- 0204570002 AFTER STUDYING DIAGRAMS OF VARIOUS PLANTS, DESCRIBE THE STRUCTUR

MATTER FOR GROWTH FROM WATER, SOIL, AND AIR.

SOURCE OF ENERGY FOR GROWING GREEN PLANTS.

GROWING PLANT AND OBSERVE WHAT HAPPENS TO IT WHEN THE ENVIRONMENTAL CONDITIONS ARE CHANGING CONDITIONS.

FOR A GROWING LAND PLANT.

FOR PLANT GROWTH ARE FOUND IN SOIL WATER.

LIGHT, GREEN PLANTS MAKE THEIR OWN FOODS FROM INORGANIC SUBSTANCES IN THE

AND KIND OF LIGHT ENERGY RECEIVED AFFECTS THE ABILITY OF GREEN PLANTS TO MAKE

DECAY RETURNS TO THE SOIL COMPOUNDS ESSENTIAL TO GROWING PLANTS.

GREEN PLANT MAY BE DEPENDENT UPON ANIMALS IN ITS ENVIRONMENT.

EXPERIMENTAL TEST, KNOWLEDGE OF PLANTS USING CARBON DIOXIDE AND NITROGEN TO MAKE SUGARS

DIFFERENT PLANT STRUCTURES, BASING THE MODELS ON OBSERVATIONS THEY HAVE MADE OF

STUDENTS, DESCRIBE THE STRUCTURE AND PARTS OF A PLANT.

0204575 PLANTS (ROOTS)

0204575001 KNOW THAT PLANTS TAKE WATER THROUTH THEIR ROOTS.

0204575002 DEMONSTRATE THAT AS BEAN SEEDS SPROUT, ROOTS GROW DOWNWARD  
BETWEEN MOIST BLOTTING PAPER AND SIDES OF GLASS JARS AND BY PLACIN

0204580 PLANTS (SEEDS)

0204580001 KNOW THAT SEEDS TRANSMIT THE CHARACTERISTICS OF THE PARENT PLANT

0204580002 DEMONSTRATE THAT GROWING PLANTS EXERT FORCE BY SPROUTING SEEDS BE  
BE PRIED APART.

0204580003 DEMONSTRATE THAT SPROUTING SEEDS EXERT FORCE BY FILLING SMALL BOT  
PUTTING CONTAINER IN DARK FOR FEW DAYS UNTIL SEEDS SPROUT PL

0204605 RELATIVE POSITIONS OF STATIONARY AND MOVING OBJECTS

0204605001 RECOGNIZE WHETHER OR NOT AN OBJECT HAS MOVED RELATIVE TO ANOTHER O

0204605002 TELL WHICH WAY AN OBJECT HAS MOVED RELATIVE TO YOU AND A REFEREN

0204605003 DESCRIBE THE POSITION OF AN OBJECT RELATIVE TO OTHER OBJECTS.

0204605004 DESCRIBE DIRECTION OF MOVEMENT THAT AN OBJECT HAS AS SEEN BY A  
THAT OBSERVER. DESCRIPTION COULD INCLUDE A REFERENCE TO ANOTHE

0204605005 RECOGNIZE EVIDENCE OF MOTION IN MOVIES OR FLIP-BOOK PICTURES  
THAT HAVE APPARENT MOTION. NOTE CHANGES IN POSITION RELATIVE

0204605006 RECOGNIZE WHETHER OR NOT AN OBJECT HAS MOVED RELATIVE TO ANOTHER O

0204605007 GIVEN ILLUSTRATIONS OF TWO OBJECTS OR SYSTEMS HAVING DIFFERENT  
SYSTEM IS MOVING FASTER AND WHICH IS MOVING SLOWER. (RELATIVE

TH THEIR ROOTS.

ROUT, ROOTS GROW DOWNWARD AND LEAVES GROW UPWARD BY SPROUTING SEEDS  
SIDES OF GLASS JARS AND BY PLACING THE JARS IN DIFFERENT POSITIONS.

ACTERISTICS OF THE PARENT PLANTS.

EXERT FORCE BY SPROUTING SEEDS BETWEEN TWO GLASS PLATES CAUSING GLASS PIECES TO

EXERT FORCE BY FILLING SMALL BOTTLE WITH DRY BEANS ADDING WATER AND CORK AND  
DAYS UNTIL SEEDS SPROUT PUSHING OUT CORK.

AND MOVING OBJECTS

HAS MOVED RELATIVE TO ANOTHER OBJECT (I.E., A REFERENCE OBJECT).

RELATIVE TO YOU AND A REFERENCE OBJECT.

RELATIVE TO OTHER OBJECTS.

AT AN OBJECT HAS AS SEEN BY ANOTHER OBSERVER RELATIVE TO THE POSITION OF  
INCLUDE A REFERENCE TO ANOTHER OBJECT OR SYSTEM.

MOVIES OR FLIP-BOOK PICTURES BY REPORTING DIFFERENTIAL SPEEDS OF OBJECTS  
CHANGES IN POSITION RELATIVE TO REFERENCE OBJECTS.

HAS MOVED RELATIVE TO ANOTHER OBJECT (I.E., A REFERENCE OBJECT)

OR SYSTEMS HAVING DIFFERENT RATES OF MOTION, RECOGNIZE WHICH OBJECT OR  
I NG SLOWER, (RELATIVE MOTION CONCEPT).

0204605008	DESCRIBE THE POSITION OF AN OBJECT AS SEEN BY ANOTHER PERSON.
0204620	SCIENTIFIC METHOD
0204620001	KNOW THAT A HYPOTHESIS MUST BE TESTED WITH EVIDENCE.
0204620002	KNOW THAT A HYPOTHESIS IS BASED ON OBSERVATION AND ANALYSIS DESIGN OF THE INVESTIGATION.
0204620003	EXPLAIN THE MEANING OF THE WORD HYPOTHESIS.
0204620004	IN RESPONSE TO A REQUEST TO DO SO, DESCRIBE DESIGNS THAT WOULD BE MODEL CAN BE USED TO EXPLAIN A GIVEN PHENOMENON.
0204620005	PROVIDED WITH A SERIES OF EXPERIMENTS RELATING TO OBSERVATIONS EXAMPLES OF THOSE WHICH ARE OBSERVATIONS AND THOSE WHICH ARE WHICH ARE
0204620006	UNDERSTAND THE USEFULNESS OF THE CONCEPT OF CHANGE.
0204620007	AFTER OBSERVING A CHANGE IN AN OBJECT UNDER CONTROLLED PHYSICAL FOR THE CHANGE.
0204620008	AFTER OBSERVING A CHANGE IN AN OBJECT UNDER CONTROLLED PHYSICAL OBJECT UNDER UNCONTROLLED PHYSICAL CONDITION.
0204620009	DESIGN A SIMPLE EXPERIMENT WHICH DEMONSTRATES APPLICATION INERTIA).
0204620010	DESIGN SIMPLE EXPERIMENT, WHICH DEMONSTRATES APPLICATION OF NEW IT WITH VARIABLES, DRAW CONCLUSIONS AND MAKE GENERAL
0204620011	DESIGN THREE EXPERIMENTS WHICH DEMONSTRATE 1. INCREASE OR DECREASE FUNCTION OF TIME (V) (TERMINAL).
0204620012	DESIGN EXPERIMENT IN WHICH THESE PRINCIPLES OF LEARNING ARE DEMONSTRATED OBSERVATIONS, USING VARIABLES, KEEPING RECORDS, DRAWING CONCLUSIONS

OF AN OBJECT AS SEEN BY ANOTHER PERSON.

MUST BE TESTED WITH EVIDENCE.

IS BASED ON OBSERVATION AND  
TION.

ANALYSIS OF OBJECTS AND EVENTS. IT DETERMINES THE

THE WORD HYPOTHESIS.

ST TO DO SO, DESCRIBE DESIGNS THAT WOULD BE APPROPRIATE TO ILLUSTRATE THAT MORE THAN ONE  
PLAIN A GIVEN PHENOMENON.

OF EXPERIENCES RELATING TO  
ARE OBSERVATIONS AND THOSE

'OBSERVATION' AND 'INFERENCES', SELECT FROM A LIST OF  
WHICH ARE INFERENCES WITH 100 PER CENT ACCURACY.

ESS OF THE CONCEPT OF CHANGE.

BE IN AN OBJECT UNDER CONTROLLED

PHYSICAL CONDITIONS, ANALYZE AND HYPOTHESE A REASON

BE IN AN OBJECT UNDER CONTROLLED  
LED PHYSICAL CONDITION.

PHYSICAL CONDITION, HYPOTHESE WHAT WILL HAPPEN TO THE

MENT WHICH DEMONSTRATES

APPLICATION OF NEWTON'S FIRST LAW OF MOTION (LAW OF

NT, WHICH DEMONSTRATES APPLICATION  
W CONCLUSIONS AND MAKE

OF NEWTON'S BASIC LAWS BY DEVELOPING HYPOTHESIS, TEST  
GENERALIZATIONS.

TS WHICH DEMONSTRATE 1. INCREASE  
(TERMINAL).

OR DECREASE OF SPEED OF AN OBJECT. 2. VELOCITY AS

ERIC  
THESE PRINCIPLES OF LEARNING  
RIABLES, KEEPING RECORDS, DRAWING

ARE DEMONSTRATED: FORMULATING AN HYPOTHESIS FROM  
CONCLUSIONS AND MAKING GENERALIZATIONS.

0204620013 DESIGN AN EXPERIMENT IN WHICH PRINCIPLES OF LEARNING ARE DEMONSTRATED  
FORGETTING, AND RELEARNING.

0204625 SOIL

0204625001 KNOW THAT MOVING WATER CONTAINS MANY PARTICLES OF SOIL.

0204625002 DEMONSTRATE SOME SOIL SUBSTANCES DISSOLVE IN WATER BY MIXING SOIL  
EVAPORATING WATER THAT PASSES THROUGH LEAVING RESIDUE OF PARTICLES.

0204625003 KNOW THAT WATER CAN CARRY SOIL OVER LONG DISTANCES.

0204625004 KNOW HOW SLOW-MOVING WATER CAN BUILD UP LAND.

0204625005 KNOW HOW FLOODING WATERS BUILD UP THE SOIL IN VALLEYS.

0204625006 KNOW THAT AS WATER SLOWS DOWN AT THE MOUTH OF A RIVER, IT DEPOSITS

0204625007 KNOW HOW TREES HOLD SOIL WITH THEIR ROOTS AND THEY PROVIDE COVER

0204625008 DEMONSTRATE THAT PLANTS (ROOTS) HOLD SOIL.

0204625009 DEMONSTRATE THAT FALLEN LEAVES HELP TO HOLD SOIL BY PLACING LEAVES  
OVER LEAVES CAUSING SAND TO BE WASHED AWAY EXCEPT UNDER LEAVES.

0204630 SOLAR SYSTEM

0204630001 GIVEN INFORMATION ON THE PLANETS OF OUR SOLAR SYSTEM ORALLY DESCR

0204630002 GIVEN REFERENCE MATERIALS ABOUT PLANETS, TRANSLATE THE PLANET MEASU

ES OF LEARNING ARE DEMONSTRATED: MEMORIZATION, REACTIVE INHIBITION,

ARTICLES OF SOIL.

LVE IN WATER BY MIXING SOIL AND DISTILLED WATER, FILTERING MIXTURE,  
LEAVING RESIDUE OF PARTICLES.

NG DISTANCES.

P LAND.

SOIL IN VALLEYS.

MOUTH OF A RIVER, IT DEPOSITS SOIL.

ROOTS AND THEY PROVIDE COVER.

SOIL.

D HOLD SOIL BY PLACING LEAVES ON THIN LAYER OF SAND SPRINKLING WATER  
AWAY EXCEPT UNDER LEAVES.

OR SOLAR SYSTEM ORALLY DESCRIBE FIVE OF THE NINE PLANETS.

ERIC  
S, TRANSLATE THE PLANET MEASUREMENTS INTO SCALE TERMS AND CONSTRUCT

- 0204630003 KNOW THAT SINCE CHANGE IS CONSTANT ALL LIVING THINGS CHANGE.  
SPACE ARE CONSTANTLY CHANGING.
- 0204630004 KNOW THAT AN OBJECT TENDS TO MOVE IN A STRAIGHT LINE.
- 0204630005 DEMONSTRATE THAT BALL ATTACHED TO SLACK THREAD WILL ROLL IN STRAIGHT  
TO TAUT. THREAD WILL ROLL IN CURVED LINE WHEN PUSHED.
- 0204630006 KNOW THAT THE SHAPE OF ORBITS AND THE POSITION OF BODIES IN SPACE
- 0204630007 UNDERSTAND WHY THE MOTION AND PATH OF CELESTIAL BODIES ARE PREDICTED
- 0204630008 KNOW THAT IT OCCURRED TO NEWTON THAT THE PULL OF GRAVITATION
- 0204630009 KNOW THAT THE MOON IS MOVING IN AN ORBIT AROUND THE EARTH.
- 0204630010 KNOW THAT THE PULL OF GRAVITATION BETWEEN EARTH AND MOON SHAPES THE
- 0204630011 KNOW THAT THE MOON TAKES ABOUT 28 DAYS TO MAKE ONE COMPLETE
- 0204630012 KNOW WHY THE CHANGING SHAPE OF THE MOON IS DUE TO ITS MOTION AROUND
- 0204630013 DEMONSTRATE HOW MOON'S SHAPE SEEMS TO CHANGE BY HOLDING BALL AND  
CAUSING LIGHTED PART OF BALL TO CHANGE SHAPE.
- 0204630014 GIVEN REMOTE LIGHT SOURCE, DESCRIBE THAT SHAPE OF LIGHTED PART  
THE BALL CIRCLES BUT DOES NOT APPEAR TO CHANGE TO ANY OTHER OBJECT
- 0204630015 PREDICT THE OBSERVABLE CHANGES IN THE MOON OVER A PERIOD OF 14 OR  
ORBIT AND THE MOTION OF THE MOON.
- 0204630016 SHOW UNDERSTANDING OF THESE WORDS IN A MATCHING TEST: FULL MOON  
ELLIPSE.

ALL LIVING THINGS CHANGE. THEREFORE EARTH AND ALL THE OTHER BODIES IN  
IN A STRAIGHT LINE.

SLACK THREAD WILL ROLL IN STRAIGHT LINE WHEN IT IS PUSHED AND THAT ONE ATTACHED  
D LINE WHEN PUSHED.

THE POSITION OF BODIES IN SPACE ARE PREDICTABLE.

H OF CELESTIAL BODIES ARE PREDICTABLE.

AT THE PULL OF GRAVITATION EXTENDED BEYOND THE EARTH TO THE MOON.

N ORBIT AROUND THE EARTH.

BETWEEN EARTH AND MOON SHAPES THE MOON'S ORBIT AROUND THE EARTH.

DAYS TO MAKE ONE COMPLETE ORBIT AROUND THE EARTH.

E MOON IS DUE TO ITS MOTION AROUND THE EARTH.

S TO CHANGE BY HOLDING BALL AND TURNING IT SLOWLY WHILE FLASHLIGHT SHINES ON IT  
CHANGE SHAPE.

BE THAT SHAPE OF LIGHTED PART OF BALL APPEARS TO CHANGE TO OBSERVER WHOM  
EAR TO CHANGE TO ANY OTHER OBSERVER.

THE MOON OVER A PERIOD OF 14 OR 28 NIGHTS RELATING THE CHANGES TO THE SHAPE OF

IN A MATCHING TEST: FULL MOON, HALF MOON, METEOR, METEORITE, COMET, AND

0204630017	KNOW THAT THE HEAD OF A COMET IS A MIXTURE OF ICE AND	ROCK.
0204630018	KNOW THAT A COMET, LIKE THE MOON, MAY TRAVEL IN A	PREDICTABLE C
0204630019	KNOW THAT THE GRAVITATIONAL PULL OF JUPITER MAY AFFECT	HALLEY'S COME
0204630020	KNOW THAT THE ORBIT OF HALLEY'S COMET IS AN ELLIPSE.	
0204630021	PREDICT THE RETURN OF HALLEY'S COMET FROM A GIVEN DATE HISTORY REASONING FOR SUCH PREDICTION.	RELATING SHAP
0204630022	KNOW WHY SOME COMETS DO NOT RETURN.	
0204630023	CONSTRUCT MODEL OF ORBIT OF COMET BY DRAWING ON FLOOR CHALK TO TRACE ORBIT LIKE THAT OF COMET.	SCALE MODEL C
0204630024	KNOW THAT METEORS MAY BE FRAGMENTS OF DISINTEGRATED	COMETS.
0204630025	KNOW THAT FRICTION OF A METEOR AGAINST THE ATMOSPHERE	RESULTS IN HE
0204630026	KNOW WHY METEORS DO NOT APPEAR AT REGULAR TIMES.	
0204630027	IDENTIFY METEORS BY OBSERVING THE NIGHT SKY DURING	TIMES OF METE
0204630028	DESCRIBE METEORS BY RECORDING THEIR CHARACTERISTICS AS	BRIGHTNESS, C

0204640

SOUND

0204640001

EXPLAIN HOW SOUND AS A VIBRATION CREATES A TO-AND-FRO MOTION.

MIXTURE OF ICE AND ROCK.  
MAY TRAVEL IN A PREDICTABLE ORBIT.  
IF JUPITER MAY AFFECT HALLEY'S COMET.  
COMET IS AN ELLIPSE.  
AT A GIVEN DATE RELATING SHAPE OF ORBIT, MOTION AROUND THE SUN AND PASS  
ION.  
BY DRAWING ON FLOOR SCALE MODEL OF PART OF SOLAR SYSTEM USING STRING AND  
COMET.  
OF DISINTEGRATED COMETS.  
INST THE ATMOSPHERE RESULTS IN HEAT AND LIGHT.  
REGULAR TIMES.  
NIGHT SKY DURING TIMES OF METEOR SHOWERS.  
R CHARACTERISTICS AS BRIGHTNESS, COLOR, DIRECTION PATHS, AND LASTING TIME.

- 0204640002 KNOW THAT SOUND IS CAUSED BY A VIBRATING OBJECT.
- 0204640003 EXPLAIN THE STATEMENT - WHERE THERE IS SOUND THERE IS MOVEMENT.
- 0204640004 DESCRIBE THAT THE RUBBER BAND AND RULER MOVE AS SOUND IS PRODUCED.
- 0204640005 DEMONSTRATE THAT VIBRATION CAUSES SOUND.
- 0204640006 DEMONSTRATE MAKING OF SOUND, BY PLUCKING A RUBBER BAND STRETCHED  
ONE END IS HELD AGAINST A TABLE.
- 0204640007 KNOW THAT SOUND TRAVELS IN WAVES, BY MOLECULAR MOTION.
- 0204640008 DEMONSTRATE A WAVE BY FLIPPING A LOOP ALONG A ROPE THAT IS TIED A  
LENGTH OF THE ROPE.
- 0204640009 KNOW THAT SOUND TRAVELS BY THE MOTION OF MOLECULES.
- 0204640010 DISCOVER BY INVESTIGATION THAT WAVES TRANSMIT ENERGY IN ALL DIREC
- 0204640011 CONSTRUCT A STRING TELEPHONE, USING TEN FEET OF STRING AND TWO P
- 0204640012 DESCRIBE THAT SOUNDS PASS BETTER THROUGH A SOLID THAN THROUGH A  
WITHOUT THE STRING TELEPHONE AND BY COMPARING SOUNDS TAPPED ON
- 0204640013 DEMONSTRATE THAT SOUND IN THE AIR PASSES THROUGH A SOLID, BY
- 0204640014 KNOW THAT SOUND TRAVELS APPROXIMATELY 1,100 FEET PER SECOND IN
- 0204640015 KNOW HOW SOUND CAN BE ABSORBED.

A VIBRATING OBJECT.

THERE IS SOUND THERE IS MOVEMENT.

AND RULER MOVE AS SOUND IS PRODUCED.

USES SOUND.

BY PLUCKING A RUBBER BAND STRETCHED AROUND A PIE TIN AND BY PLUCKING A RULER WHILE  
LE.

VES, BY MOLECULAR MOTION.

G A LOOP ALONG A ROPE THAT IS TIED AT THE OTHER END, CAUSING THE LOOP TO TRAVEL THE  
E MOTION OF MOLECULES.

T WAVES TRANSMIT ENERGY IN ALL DIRECTIONS.

USING TEN FEET OF STRING AND TWO PAPER CUPS.

TER THROUGH A SOLID THAN THROUGH AIR, BY COMPARING WHISPERS HEARD WITH AND  
AND BY COMPARING SOUNDS TAPPED ON WALL WITH AND WITHOUT EAR ON WALL.

AIR PASSES THROUGH A SOLID, BY USING THE STRING TELEPHONE.

XIMATELY 1,100 FEET PER SECOND IN THE AIR.

D.

0204640016 . KNOW THAT WHEN SOUND HITS A WALL IT CAN BOUNCE BACK.

0204640017 KNOW THAT AN ECHO IS CAUSED BY THE BOUNCE OF SOUND.

0204640018 KNOW THAT THE MOLECULAR THEORY EXPLAINS WHY SOUND TRAVEL

0204640019 KNOW THAT THE PITCH OF A SOUND DEPENDS ON THE RATE OF THE VI

0204640020 DISCOVER THAT THE RATE OF VIBRATION CAN BE CHANGED IN DIFFER

0204640021 STATE TWO WAYS TO CHANGE PITCH.

0204640022 DEMONSTRATE TO PUPILS THAT CHANGING THE RATE OF VIBRAT

0204640023 USE A RULER OR RUBBER BANDS TO DEMONSTRATE THE CHANGES IN PIT

0204640024 DEMONSTRATE HIGH AND LOW PITCH SOUNDS BY PULLING A PIECE OF STI  
DIFFERENT SPEEDS.

0204640025 IDENTIFY HIGH PITCH WITH FAST VIBRATIONS OF THE CARDBO

0204640026 IN A MATCHING TEST SHOW KNOWLEDGE OF HOW SOUND TRAVELS, THE CA

0204660 WATER

0204660001 KNOW THAT THE WATER SUPPLY IS THE RESULT OF THE CYCLE OF EVAPOR

0204660002 DRAW AND EXPLAIN A DIAGRAM SHOWING THE WATER CYCLE,

WALL IT CAN BOUNCE BACK.

BY THE BOUNCE OF SOUND,

RY EXPLAINS WHY SOUND

TRAVELS BETTER IN A SOLID THAN IN A GAS,

ND DEPENDS ON THE RATE OF

THE VIBRATION.

BRATION CAN BE CHANGED IN

DIFFERENT WAYS.

CH.

HANGING THE RATE OF

VIBRATION CHANGES THE PITCH.

TO DEMONSTRATE THE CHANGES

IN PITCH.

CH SOUNDS BY PULLING A PIECE OF STIFF CARDBOARD ACROSS THE TEETH OF A COMB, AT

T VIBRATIONS OF THE

CARDBOARD AND COMB, AND LOW PITCH WITH SLOW VIBRATIONS.

LEDGE OF HOW SOUND TRAVELS,

THE CAUSE OF ECHO, AND THE SPEED OF THE TRAVEL OF SOUND.

S THE RESULT OF THE CYCLE OF EVAPORATION AND CONDENSATION.

- 0204660003 EXPLAIN THE WORK OF THE SUN IN THE WATER CYCLE.
- 0204660004 KNOW THAT WATER IS A COMPONENT OF ALL ORGANISMS.
- 0204660005 STATE THAT WATER IS A PART OF ALL LIVING THINGS. (DEMONST
- 0204660006 EXPLAIN HOW SAND CAN BE USED TO FILTER SOME MATERIALS OUT OF A
- 0204660007 CONSTRUCT A MODEL OF A WATER PURIFYING SYSTEM, BY PLACING  
OVER THE COTTON, SO THAT POURED LIQUIDS WILL PASS THROUGH
- 0204660008 DEMONSTRATE THE USE OF THE MODEL WATER-PURIFIER BY POURING  
FILTERING OUT SOIL PARTICLES, AND ALLOWING MUCH CLEARER WATER TO
- 0204660009 DEMONSTRATE THAT SETTLING IS ONE WAY OF CLEANING WATER, BY MIXING  
STAND FOR A WHILE, CAUSING PARTICLES TO SETTLE TO THE BOTTOM.
- 0204660010 KNOW THAT WATER CONTAINING DISSOLVED SUBSTANCES IS HEAVIER
- 0204660011 KNOW THAT THE WATER TABLE MARKS THE WATER LEVEL IN SOIL.
- 0204660012 DEMONSTRATE THERE IS A QUANTITY OF WATER IN AN APPLE BY WEIGHING  
INTO SMALL PIECES ALLOWING THEM TO DRY FOR FEW DAYS AND WEIGHING
- 0204660013 DESCRIBE THE WEIGHT OF THE APPLE BEFORE AND AFTER DRYING,  
OF THE WATER LOST FROM THE APPLE.
- 0204670 WEATHER (CLOUDS)
- 0204670001 KNOW AS RISING AIR COOLS, WATER VAPOR CONDENSES TO FORM A CLOUD.

THE WATER CYCLE.

ALL ORGANISMS.

LIVING THINGS. (DEMONSTRATING THAT THERE IS WATER IN FOOD).

FILTER SOME MATERIALS OUT OF WATER.

PURIFYING SYSTEM, BY PLACING COTTON IN A FUNNEL AND ADDING A LAYER OF SAND  
LIQUIDS WILL PASS THROUGH THE FILTER INTO A JAR.

WATER-PURIFIER BY POURING WATER FROM THE SETTLING JAR INTO THE FUNNEL  
ALLOWING MUCH CLEARER WATER TO PASS THROUGH.

WAY OF CLEANING WATER, BY MIXING WATER AND SOIL, THEN ALLOWING THE MIXTURE TO  
LET SLETTLES SETTLE TO THE BOTTOM.

DISSOLVED SUBSTANCES IS HEAVIER THAN PURE WATER.

THE WATER LEVEL IN SOIL.

OF WATER IN AN APPLE BY WEIGHING APPLE WITH SPRING SCALE, THEN CUTTING APPLE  
TO DRY FOR FEW DAYS AND WEIGHING PIECES AGAIN.

BEFORE AND AFTER DRYING, THE WEIGHT LOST FROM THE APPLE, AND THE WEIGHT

VAPOR CONDENSES TO FORM A CLOUD.

0204680	WEATHER (PRECIPITATION)	
0204680001	KNOW THAT RAIN FORMS AS CLOUD DROPLETS COME TOGETHER	INTO
0204680002	UNDERSTAND THAT CLOUD DROPLETS ARE FORMED BY THE COOLING OF WA	
0204680003	KNOW THAT CLOUD DROPLETS COLLIDE TO MAKE RAINDROPS,	
0204680004	UNDERSTAND HOW ICE SPECKS MELT TO MAKE RAINDROPS,	
0204690	WEATHER (RECORDING)	
0204690001	KEEP DAILY RECORD OF YOUR OBSERVATIONS OF ELEMENTS OF	WEATH
	FOR RECORDING ANY INFORMATION YOU CANNOT OBSERVE	YOURS
0204690002	USING A RAIN-GAUGE, ACQUIRE DATA EACH DAY TO MAKE A	LONG-
0204690003	USING A RAIN-GAUGE, RECORD THE AMOUNT OF RAINFALL FOR A	MONTH
0204690004	USING THE THERMOMETER, ACQUIRE DATA EACH DAY TO MAKE A	LONG-
0204690005	USING A WIND VANE, ACQUIRE DATA EACH DAY TO MAKE A	LONG-
0204690006	USING WEATHER INSTRUMENTS, OBSERVATIONS AND WEATHER	KNOWL
	TABLE OR GRAPH.	
0204690007	CONSTRUCT A POINT GRAPH OR LINE GRAPH FROM A WEATHER	MAP E
0204690008	FROM OBSERVATIONS AND WEATHER KNOWLEDGE, INTERPRET	INFOR
0204690009	CONSTRUCT A WEATHER CHART BASED ON THE DATA TAKEN FROM	AN AE
	WIND AT A GIVEN TIME.	

OPULETS COME TOGETHER INTO LARGER DROPS OF WATER.

RE FORMED BY THE COOLING OF WATER VAPOR.

TO MAKE RAINDROPS.

TO MAKE RAINDROPS.

ATIONS OF ELEMENTS OF WEATHER FOR TWO WEEKS. USE REPORTS FROM WEATHER BUREAU  
U CANNOT OBSERVE YOURSELF.

EACH DAY TO MAKE A LONG-RANGE WEATHER CHART.

OUNT OF RAINFALL FOR A MONTH AND GRAPH THIS INFORMATION ON A LINE GRAPH.

ATA EACH DAY TO MAKE A LONG-RANGE WEATHER CHART.

EACH DAY TO MAKE A LONG-RANGE WEATHER CHART.

VATIONS AND WEATHER KNOWLEDGE, IDENTIFY AND NAME ALL INFORMATION SHOWN IN A

GRAPH FROM A WEATHER MAP EACH DAY.

OWLEDGE, INTERPRET INFORMATION SHOWN IN A TABLE OR GRAPH.

ON THE DATA TAKEN FROM AN AEROVANE TO SHOW THE VELOCITY AND DIRECTIONS OF THE

0204690010    CONSTRUCT A WEATHER CHART BASED ON THE DATA TAKEN FROM    AN ANEMOMET

0204690011    CONSTRUCT A WEATHER CHART BASED ON THE DATA TAKEN FROM A TIDE GAUGE  
GIVEN TIME.

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THE DATA TAKEN FROM AN ANEMOMETER.

THE DATA TAKEN FROM A TIDE GAUGE TO SHOW THE RISE AND FALL OF THE TIDES AT A

0205005

ADAPTATION (ANIMALS).

0205005001

KNOW THAT GROWTH OF ORGANISMS FROM EGG TO ADULT PROVIDES MANY EXAMPLES

0205005002

KNOW THAT THE ADAPTATIONS OF AN ANIMAL TO ITS ENVIRONMENT  
TO THE FUNCTIONS SERVED.

0205005003

EXPLAIN HOW MAMMALS ARE BETTER ADAPTED FOR THE PROTECTION

0205005004

INFER THAT THE ENVIRONMENT OF PAST ANIMALS WAS DIFFERENT FROM THE PRESENT  
FOUND.

0205005005

INFER SOME OF THE STRUCTURAL ADAPTATIONS OF EARLY LIFE.

0205005006

DEVELOP A SEQUENTIAL PATTERN ON A CHART FOR THE APPEARANCE OF

0205025

ADAPTATION (HABITAT)

0205025001

KNOW THAT THERE IS AN INTERCHANGE OF MATTER AND ENERGY BETWEEN THE

0205025002

KNOW THAT MOST LIVING THINGS DEPEND ON A CONTINUOUS SUPPLY OF OXYGEN

0205025003

KNOW THAT EACH KIND OF ORGANISM IS ADAPTED TO A SPECIAL ENVIRONMENT.

0205025004

KNOW THAT THE ENVIRONMENT TO WHICH AN ORGANISM IS ADAPTED SUPPLIES

0205025005

KNOW THAT MAN, LIKE ALL OTHER LIVING THINGS, IS DEPENDENT ON THE  
LIVING THINGS IN IT.

0205025006

KNOW THAT AN ORGANISM MUST HAVE AN ENVIRONMENT THAT SUPPLIES ITS

0205025007

INFER THAT ENVIRONMENTAL CONDITIONS AFFECT THE DEVELOPMENT

S FROM EGG TO ADULT PROVIDES MANY EXAMPLES OF ADAPTIVE CHANGE AND DEVELOPMENT.

AN ANIMAL TO ITS ENVIRONMENT CAN BE UNDERSTOOD BY RELATING BONE STRUCTURE  
 ER ADAPTED FOR THE PROTECTION AND CARE OF THEIR YOUNG.

F PAST ANIMALS WAS DIFFERENT FROM THE PRESENT ENVIRONMENT IN WHICH THEIR FOSSILS ARE  
 ADAPTATIONS OF EARLY LIFE.

ON A CHART FOR THE APPEARANCE OF THE DIFFERENT FORMS OF LIFE.

HANGE OF MATTER AND ENERGY BETWEEN THE ORGANISM AND ITS ENVIRONMENT.

DEPEND ON A CONTINUOUS SUPPLY OF OXYGEN.

ISM IS ADAPTED TO A SPECIAL ENVIRONMENT.

WHICH AN ORGANISM IS ADAPTED SUPPLIES ALL THE ORGANISM'S NEEDS.

R LIVING THINGS, IS. DEPENDENT ON HIS ENVIRONMENT---ON ALL THE MATTER AND

AVE AN ENVIRONMENT THAT SUPPLIES ITS NEEDS IN ADEQUATE AMOUNTS.

DITIONS AFFECT THE DEVELOPMENT OF AN ORGANISM.

0205025008 TESTS OF FOODS GIVE INSIGHT INTO THE MATTER LIVING THINGS TAKE

0205025009 KNOW THAT A LIVING THING IS THE PRODUCT OF ITS HEREDITY AND ENVIRONMENT

0205025010 DEVELOP UNDERSTANDING OF THE IMPORTANCE OF ADAPTATIONS OF STRUCTURE

0205025011 KNOW THAT STRUCTURAL ADAPTATIONS TO ENVIRONMENTS OF THE PAST OCCUR

0205025012 KNOW THAT GRADUAL CHANGES OF STRUCTURE IN WATER ANIMALS OF THE ANCIENT

0205025013 COMPARE ENVIRONMENTAL CONDITIONS IN WATER AND ON LAND AND RELATE

0205025014 COMPARE ENVIRONMENTAL CONDITIONS IN WATER AND ON LAND AND RELATE

0205025015 ANALYZE THE RELATIONSHIP BETWEEN ENVIRONMENT AND LIVING THINGS.

0205025016 PREDICT WHICH OF SEVERAL EXPERIMENTS IS BEST DESIGNED TO ANSWER GIVEN QUESTIONS (TEMPERATURE, AIR SUPPLY, LIGHT, WATER, FOOD; ON BEHAVIOR OF

0205030 ADAPTATION (MAN)

0205030001 WRITES A PARAGRAPH DESCRIBING THE DETAILS OF PROBLEMS MAN WILL FACE (HEAT, COLD).

0205035 ADAPTATION (PLANTS)

0205035001 INFER THAT CELL WALLS SUPPORT AND STIFFEN THE STRUCTURE OF PLANTS.

0205035002 KNOW THAT AS PRIMITIVE PLANTS DEVELOPED STIFFER CELL WALLS, THE

INTO THE MATTER LIVING THINGS TAKE FROM THEIR ENVIRONMENT.

THE PRODUCT OF ITS HEREDITY AND ENVIRONMENT.

IMPORTANCE OF ADAPTATIONS OF STRUCTURE TO SUCCESSFUL SURVIVAL IN AN ENVIRONMENT.

IONS TO ENVIRONMENTS OF THE PAST OCCURRED SLOWLY.

STRUCTURE IN WATER ANIMALS OF THE ANCIENT SEAS ADAPTED THEM FOR LAND LIVING.

IONS IN WATER AND ON LAND AND RELATE THESE ENVIRONMENTS TO DEVELOPING LIFE FORMS.

IONS IN WATER AND ON LAND AND RELATE THESE ENVIRONMENTS TO DEVELOPING LIFE FORMS.

BEEN ENVIRONMENT AND LIVING THINGS.

EXPERIMENTS IS BEST DESIGNED TO ANSWER GIVEN QUESTION ABOUT EFFECT OF VARIABLES  
LIGHT, WATER, FOOD; ON BEHAVIOR OF GROWTH OF ORGANISM IN ITS ENVIRONMENT.

THE DETAILS OF PROBLEMS MAN WILL FIND IN A NEW ENVIRONMENT (OXYGEN, ATMOSPHERE,

AND STIFFEN THE STRUCTURE OF PLANTS.

DEVELOPED STIFFER CELL WALLS, THEY GREW TALLER.

0205040 ADAPTATION (PLANTS AND ANIMALS)

0205040001 KNOW THAT LIVING THINGS HAVE CHANGED OVER THE AGES.

0205040002 KNOW THAT LIVING THINGS HAVE BEEN CHANGING SINCE LIFE FIRST B

0205040003 DEVELOP A SEQUENTIAL PATTERN FOR THE APPPEARANCE OF THE DIFFERE

0205050 AMPHIBIANS

0205050001 OBSERVE AND STUDY THE LIFE CYCLE OF AN AMPHIBIAN.

0205050002 DESCRIBE GROWTH AND DEVELOPMENT OF FROG. OBSERVE EGGS IN ACQU  
GROW TO FROGS.

0205050003 DESCRIBE FROG BEGINNING LIFE AS SINGLE CELL MULTIPLIES BY CELL  
BREATHING FROG.

0205055 ANIMALS

0205055001 IDENTIFY BALL ON THE END OF THIGH BONE AND SOCKET OF HIP BONE.

0205055002 RECONSTRUCT THE LEG BONES OF A COOKED CHICKEN AND LABEL THE BAL

0205055003 ORDER BONES OF THE LEG OF COOKED CHICKEN WHEN GIVEN THEM SEPARAT

0205055004 CONTROL THE ENVIRONMENT AND DIET OF AN ANIMAL AND OBSERVE  
THE NON-CONTROLLED ANIMAL.

0205055005 CONSTRUCT SMALL SYSTEM FOR OBSERVING SEALED-IN ORGANISM. SEAL AG

CHANGED OVER THE AGES.

BEEN CHANGING SINCE LIFE FIRST BEGAN ON EARTH OVER TWO BILLION YEARS AGO.

FOR THE APPPEARANCE OF THE DIFFERENT FORMS OF LIFE.

LE OF AN AMPHIBIAN.

OF FROG. OBSERVE EGGS IN ACQUARIUM AS THEY DEVELOP AND HATCH INTO TADPOLES AND

SINGLE CELL MULTIPLIES BY CELL DIVISION, FORMS STRUCTURES, DEVELOPS INTO AIR

IGH BONE AND SOCKET OF HIP BONE.

COOKED CHICKEN AND LABEL THE BALL AND SOCKET JOINTS CORRECTLY.

ED CHICKEN WHEN GIVEN THEM SEPARATED.

ET OF AN ANIMAL AND OBSERVE THE CHANGE IN THE CONTROLLED ANIMAL WITH THAT OF

ERVING SEALED-IN ORGANISM. SEAL AQUATIC PLANTS, SAND, AQUARIUM WATER IN JAR.

0205065 CELLS

0205065001 DEFINE IN WRITING AND ORALLY WHAT THE WORD CELL MEANS.

0205065002 CONSTRUCT MICROSCOPE SLIDE PREPARATION. PLACE SCRAPING OF INSIDE OF  
ADD COVER SLIP.

0205065003 DESCRIBE SHAPE OF CELLS.

0205065004 IDENTIFY NUCLEUS IN CELL.

0205065005 CONSTRUCT MODEL OF A CELL. USE MIXTURE OF WATER, CLEAR GELATIN, STARCH  
WILL GARDEN INSIDE SEALED PLASTIC BAG.

0205065006 IDENTIFY PARTS OF MODEL SIMILAR TO CELL, AS GELATIN FOR CYTOPLASM

0205065007 KNOW THAT CELLS INTERCHANGE MATTER AND ENERGY WITH THE ENVIRONMENT

0205065008 INFER, THROUGH INVESTIGATION, THAT A YEAST CELL GETS ENERGY FOR

0205065009 DEMONSTRATE THAT YEAST CELLS INCREASE WITH REPRODUCTION. COMPARE SMALL  
WITH WATER AND SAME AMOUNT MIXED WITH SUGAR AND WATER. FILTER BOTH

0205065010 DESCRIBE DIFFERENCE DUE TO GROWTH AND REPRODUCTION OF YEAST CELLS

0205065011 DEMONSTRATE THAT A CELL MEMBRANE ALLOWS SOME MATERIALS TO PASS THROUGH  
SOLUTION. STARCH TURNS BLUE-BLACK.

0205065012 DESCRIBE THAT IODINE SOLUTION PASSES INTO CELL MODEL; STARCH DID NOT

0205065013 KNOW THAT ENERGY WITHIN A CELL COMES FROM A CYCLE OF BREAKING DOWN  
MOLECULES (THE CELL ENERGY PROCESS).

0205065014 KNOW THAT ENERGY IS A CYCLICAL PROCESS---ALL WITHIN A TINY CELL.

WHAT THE WORD CELL MEANS.

PREPARATION. PLACE SCRAPING OF INSIDE CHEEK ON DROP OF WATER ON GLASS SLIDE; STAIN;

MIXTURE OF WATER, CLEAR GELATIN, STARCH, COLOGNE, SMALL PIECES OF CLAY; GELATIN IC BAG.

TO CELL, AS GELATIN FOR CYTOPLASM PLASTIC BAG FOR MEMBRANE, CLAY OR NUCLEUS.

INTERACT AND ENERGY WITH THE ENVIRONMENT.

WHAT A YEAST CELL GETS ENERGY FOR GROWTH FROM SUGAR.

INCREASE WITH REPRODUCTION. COMPARE SMALL AMOUNT OF YEAST CELLS AFTER 3 DAYS MIXED WITH SUGAR AND WATER. FILTER BOTH ONTO PAPER.

GROWTH AND REPRODUCTION OF YEAST CELLS IN SUGAR SOLUTION.

WHAT IT ALLOWS SOME MATERIALS TO PASS THROUGH. USE CELL MODEL; PLACE IN IODINE SOLUTION.

WHAT IT PLACES INTO CELL MODEL; STARCH DID NOT COME OUT (IODINE NOT TURNED BLUE-BLACK).

WHERE IT COMES FROM A CYCLE OF BREAKING DOWN AND BUILDING HIGH ENERGY CONTAINING (CELLS).

THE WHOLE PROCESS--ALL WITHIN A TINY CELL.

- 0205065015 DESCRIBE THE ENERGY CYCLE IN CELLS.
- 0205065016 DERIVE INSIGHT INTO DIFFUSION AS A BASIC PROCESS IN ALL BODIES, ES
- 0205065017 UNDERSTAND THAT THE CELL MEMBRANE DELIMITS THE CELL AS A FUNCTIONIN
- 0205065018 THROUGH THE CONSTRUCTION OF MODELS, GAIN A BETTER IDEA OF CELL ST
- 0205065019 KNOW THAT CELLS ARE SPECIALIZED FOR DIFFERENT FUNCTIONS.
- 0205065020 KNOW THAT CELLS REPRODUCE THEMSELVES.
- 0205065021 KNOW THAT WHEN CELLS DIVIDE, EACH NEW CELL HAS ITS OWN NUCLEUS,
- 0205065022 PERCEIVE THAT CELL DIVISION TAKES PLACE BY CONTINUAL DOUBLING.
- 0205065023 KNOW THAT A SINGLE-CELLED ORGANISM PERFORMS ALL THE LIFE FUNCTIONS  
COMMUNITY OF INTERDEPENDENT CELLS.
- 0205065024 BUILD A FOUNDATION FOR UNDERSTANDING ORGANIZATION OF CELL STRUC
- 0205065025 EXPLAIN THE FUNCTIONS OF EACH TYPE CELL IN THE BODY.
- 0205065026 VISUALIZE HOW CHROMOSOMES DUPLICATE IN CELL DIVISION.
- 0205065027 DEMONSTRATE KNOWLEDGE OF ANIMAL CELL REPRODUCTION BY DRAWING THE  
CELL HAS THE SAME NUMBER OF CHROMOSOMES, AND NAMING SUBSTANCES
- 0205065028 KNOW THAT GROWTH IN A MANY-CELLED ORGANISM CONSISTS IN MULTIPLICAT

A BASIC PROCESS IN ALL BODIES, ESPECIALLY CELLS.

DELIMITS THE CELL AS A FUNCTIONING UNIT.

LS, GAIN A BETTER IDEA OF CELL STRUCTURE.

FOR DIFFERENT FUNCTIONS.

LIVES.

NEW CELL HAS ITS OWN NUCLEUS.

PLACE BY CONTINUAL DOUBLING.

PERFORMS ALL THE LIFE FUNCTIONS WITHIN THE CELL; A MANY-CELLED ORGANISM IS A

ORGANIZATION OF CELL STRUCTURE FOR CELL FUNCTION WITHIN ORGANISMS.

CELL IN THE BODY.

ATE IN CELL DIVISION.

CELL REPRODUCTION BY  
CHROMOSOMES, AND NAMING

DRAWING THREE STAGES OF CELL DIVISION; STATE EACH NEW  
SUBSTANCE RESPONSIBLE.

ORGANISM CONSISTS IN MULTIPLICATION AND DIFFERENTIATION OF CELLS.

0205065029	DISCOVER THE DISTINCTION BETWEEN CYTOPLASM AND	PROTOPLASM
0205065030	KNOW THAT PROTOPLASM, THE LIVING MATERIAL IN THE CELL, CRUST AND ATMOSPHERE.	IS COMPOSED
0205065031	KNOW THAT PROTOPLASM CONTAINS COMMON ELEMENTS AND	COMPOUNDS
0205065032	WRITE OR TELL THREE OF THE FIVE KINDS OR COMPOUNDS	FOUND IN
0205065033	SHOW RECOGNITION OF THE WORD PROTOPLASM THROUGH A	MATCHING
0205065034	KNOW THAT THE CELL IS THE UNIT OF STRUCTURE AND	FUNCTION
0205065035	KNOW THAT FOOD SUBSTANCES DIFFUSE THROUGH MEMBRANES.	
0205065036	KNOW THAT CELLS WITH DIFFERENT FUNCTIONS APPEAR	DIFFERENT
0205065037	SEE THE UNITY (THE BASIC STRUCTURE) IN ALL CELLS AND THE DIVERSITY	IN
0205065038	KNOW THAT CELLS SECRETE NONLIVING MATERIAL.	
0205065039	KNOW THAT IN MANY-CELLED ORGANISMS, GROUPS OF CELLS AND SPECIALIZED TO PERFORM THE BODY'S FUNCTIONS.	TISSUES OR
0205065040	KNOW THAT SIMILAR CELLS WITH SIMILAR FUNCTIONS ARE	ORGANIZED
0205065041	KNOW THAT ORGANISMS ARE MADE UP OF CELLS. THE UNIT OF	STRUCTURE
0205065042	MAKE DRAWINGS OF ALL THE TYPES OF CELLS IN THE BODY AND	LABEL

BETWEEN CYTOPLASM AND PROTOPLASM.

LIVING MATERIAL IN THE CELL, IS COMPOSED OF ELEMENTS AND COMPOUNDS IN THE EARTH'S

AINS COMMON ELEMENTS AND COMPOUNDS.

E. FIVE KINDS OR COMPOUNDS FOUND IN CELLS.

ORD PROTOPLASM THROUGH A MATCHING TEST.

UNIT OF STRUCTURE AND FUNCTION; A LIVING THING DEVELOPS FROM A SINGLE CELL.

DIFFUSE THROUGH MEMBRANES.

ERENT FUNCTIONS APPEAR DIFFERENT IN DETAIL, BUT NOT IN BASIC STRUCTURES.

STRUCTURE) IN ALL CELLS AND THE DIVERSITY IN TERMS OF ADAPTATION TO FUNCTION.

ONLIVING MATERIAL.

ORGANISMS, GROUPS OF CELLS AND TISSUES ARE ORGANIZED INTO ORGAN SYSTEMS, ALL  
E BODY'S FUNCTIONS.

ITH SIMILAR FUNCTIONS ARE ORGANIZED INTO TISSUES.

ADE UP OF CELLS. THE UNIT OF STRUCTURE AND FUNCTION IN THE ORGANISM IS THE CELL.

TYPES OF CELLS IN THE BODY AND LABEL DRAWINGS.

0205065043	KNOW THAT THE SINGLE-CELLED ORGANISMS THAT DEVELOPED IN THE EARLY LATER ERAS; ADAPTATION TO THE ENVIRONMENT PRODUCED MORE COMPLEX ST	
0205070	CLASSIFIC/ ION	
0205070001	KNOW THAT OBJECTS AND EVENTS CAN BE GROUPED OR	CLASSIFIED
0205075	CLASSIFY (ANIMALS)	
0205075001	GIVEN THE CHARACTERISTICS OF SEVERAL ANIMALS, CONSTRUCT SIMILARITIES, I.E., PETS, SMALL ANIMALS, LARGE ANIMALS	A NEW CLAS AND HARMFU
0205075002	WHEN GIVEN A LIST OF THIRTY DIFFERENT ANIMALS (OR 20 OF THE ANIMALS OR ANIMAL PICTURES INTO GROUPS, I.E.,	PICTURES O MAMMALS, B
0205075003	WRITE A PARAGRAPH OR TWO ON THIS TOPIC: HOW SCIENTISTS	KNOW WHICH
0205075004	DESCRIBE AT LEAST TWO CHANGES IN THE STRUCTURE OF A	HORSE DURI
0205075005	EXPLORE EVIDENCES OF LIFE IN THE PAST. DRAW INFERENCES ABOUT A FO FUNCTIONS OF BONES FROM A LIVING ANIMAL.	
0205080	CLASSIFY BY FIVE SENSES	
0205080001	RECOGNIZE SEVERAL PROPERTIES OF AN OBJECT OR SUBSTANCE STATE OF MATTER; RECOGNIZE THE SENSE USED TO DETERMINE	INCLUDING EACH OF TH
0205085	CLASSIFY BY KIND, FORM, AND PROPERTIES	
0205085001	USING A GRADUATED CYLINDER, MEASURE QUANTITIES OF WATER	TO WITHIN

ORGANISMS THAT DEVELOPED IN THE EARLY SEAS GAVE RISE TO THE MANY-CELLED ORGANISMS OF THE ENVIRONMENT PRODUCED MORE COMPLEX STRUCTURES.

ARE GROUPED OR CLASSIFIED.

FOR ALL ANIMALS, CONSTRUCT A NEW CLASSIFICATION SYSTEM GROUPING ANIMALS BY THEIR TYPES, LARGE ANIMALS AND HARMFUL ANIMALS.

FOR DIFFERENT ANIMALS (OR PICTURES OF THIRTY DIFFERENT ANIMALS), CLASSIFY AT LEAST THEM INTO GROUPS, I.E., MAMMALS, BIRDS OR AMPHIBIANS.

TOPIC: HOW SCIENTISTS KNOW WHICH BONES OF A FOSSIL FIT TOGETHER.

THE STRUCTURE OF A HORSE DURING SIXTY MILLION YEARS.

LAST, DRAW INFERENCES ABOUT A FOSSIL ANIMAL BY EXAMINING THE STRUCTURE AND THE ANIMAL.

THE OBJECT OR SUBSTANCE INCLUDING COLOR, SHAPE, SIZE, TEXTURE, TASTE, ODOR, WHICH WOULD BE USED TO DETERMINE EACH OF THESE PROPERTIES.

PROPERTIES OF WATER TO WITHIN TWO MILLILITERS OF EXACTNESS.

0205085002 USE AN ELEMENTARY BALANCE SCALE TO WEIGH OBJECTS TO THE NEAREST

0205090 CLASSIFY (MATTER)

0205090001 GIVEN A LIST OF SUBSTANCES, IDENTIFY EACH SUBSTANCE AS A GAS, LIQ

0205090002 GIVEN A LIST OF SUBSTANCES, IDENTIFY EACH SUBSTANCE AS A GAS, LIQ

0205090003 GIVEN SITUATION IN WHICH OBJECT OR SUBSTANCE MUST FIT INTO PRE  
CAPACITY, EXPLAIN WHETHER IT IS MOST IMPORTANT TO KNOW ABOUT MA

0205090004 IDENTIFY AN ACCEPTABLE DEFINITION OF THE TERMS MATTER, MOLECULE

0205090005 ON A DIAGRAM SHOWING THE PARTS OF AN ATOM, RECOGNIZE THE NUCLEUS.

0205100 CLASSIFY (PLANT AND ANIMAL)

0205100001 KNOW THAT SEDIMENTARY DEPOSITS INDICATE AGE OF FOSSILS.

0205100002 INFER THAT THE AGE OF FOSSILS CAN BE DATED WITH GREAT ACCURACY

0205100003 FROM A GRAPH OF SEDIMENTARY LAYERS AND FOSSILS DETERMINE THE OLDE

0205100004 KNOW THAT LIVING THINGS CAN GROW AND CAN REPRODUCE.

0205100005 KNOW THAT PLANTS AND ANIMALS ARE USEFUL TO MAN IN MANY WAYS.

TO WEIGH OBJECTS TO THE NEAREST GRAM.

IFY EACH SUBSTANCE AS A GAS, LIQUID, OR A SOLID.

IFY EACH SUBSTANCE AS A GAS, LIQUID, OR A SOLID.

OR SUBSTANCE MUST FIT INTO PRESCRIBED SPACE OR CONFORM TO GIVEN WEIGHT  
MOST IMPORTANT TO KNOW ABOUT MATERIAL'S WEIGHT OR ITS VOLUME.

N OF THE TERMS MATTER, MOLECULE, ATOM, ELECTRON, AND NEUTRON.

AN ATOM, RECOGNIZE THE NUCLEUS, A PROTON, AN ELECTRON, AND A NEUTRON.

NDICATE AGE OF FOSSILS.

N BE DATED WITH GREAT ACCURACY.

RS AND FOSSILS DETERMINE THE OLDEST.

AND CAN REPRODUCE.

USEFUL TO MAN IN MANY WAYS.

0205105	CLASSIFY (PLANT AND ANIMAL CELLS)	
0205105001	GIVEN A SIMPLE SLIDE AND A MICROSCOPE, CLASSIFY OBJECTS ON THE SLIDE (E.G., AIR BUBBLES, DIRT, CRYSTALS).	
0205105002	KNOW THAT PLANT AND ANIMAL CELLS HAVE BASICALLY SIMILAR	STRUCTURE
0205105003	IDENTIFY FROM GROUP OF PICTURES EXHIBITING CELL 1. PLANT CELLS 2. ANIMAL CELLS, OR 3. BOTH.	STRUCTURE
0205105004	KNOW THAT PLANT AND ANIMAL CELLS CHANGE MATTER AS THEY	INTERCHANGE
0205110	CLOTH	
0205110001	EVALUATE THE USEFULNESS OF PLANT AND ANIMAL FIBERS.	
0205110002	DISTINGUISH BETWEEN WOOL AND COTTON. OBSERVE ODOR OF	BURNING
0205115	ECOLOGY	
0205115001	AFTER VIEWING A FILM ON CONSERVATION LIST FIVE	CONSERVATION
0205115002	USING LIBRARY RESOURCES, WRITE TO THE SATISFACTION OF	THE TEACHER
0205115003	RELATE CONSERVATION PRACTICES TO 3 OF 5 COMPONENTS IN	HIS ENVIRONMENT
0205120	ELECTRICITY	
0205120001	WHEN GIVEN A LESSON ON THE USEFULNESS OF ELECTRICITY OF TODAY, WRITE BE LIKE WITH OUT ELECTRICITY.	

CLASSIFY OBJECTS ON THE SLIDE AS CELLS OR OBJECTS WHICH ARE NOT CELLS  
STRUCTURALLY SIMILAR STRUCTURES.

ING CELL STRUCTURE THOSE CELLULAR CHARACTERISTICS PRESENT ONLY  
TH.

MATTER AS THEY INTERCHANGE MATTER AND ENERGY WITH THE ENVIRONMENT.

IMAL FIBERS.

ERVE ODOR OF BURNING PROTEIN WITH WOOL AND NOT COTTON.

T FIVE CONSERVATION PRACTICES THAT SHOULD BE MODIFIED.

TSFACTION OF THE TEACHER, A COMPOSITION TITLED 'ACCEPTED CONSERVATION

COMPONENTS IN HIS ENVIRONMENT (WATER, AIR, WILDLIFE, LAND, MINERAL).

ELECTRICITY OF TODAY, WRITE AT LEAST TWO PARAGRAPHS ON WHAT LIFE WOULD

0205120002 WHEN PROVIDED WITH APPROPRIATE MATERIALS TO BUILD AN ELECTRIC  
LIGHT BULB), HYPOTHEZIZE WHAT WOULD HAPPEN IF ALL THE COMPOUNDS

0205125 ENERGY TRANSFORMATION

0205125001 KNOW THAT GRAVITATION IS UNIVERSAL.

0205125002 KNOW THAT WEIGHT IS A MEASURE OF GRAVITATIONAL PULL ON A MASS.

0205125003 INFER THAT THE LESS THE MASS, THE LESS ITS GRAVITATIONAL PULL AND  
OVERCOME IT.

0205125004 INFER THAT THE GREATER THE MASS, THE GREATER ITS GRAVITATIONAL  
BE USED TO OVERCOME IT.

0205125005 KNOW THAT TO MOVE AN OBJECT, ENERGY MUST BE APPLIED TO OVERCOME

0205125006 TELL HOW ENERGY IS USEFUL TO YOU WHEN RELEASED.

020512500 KNOW THAT CHANGES ARE PREDICTABLE.

0205125008 KNOW THAT MATTER CAN BE CHANGED INTO ENERGY. HOWEVER THE TOTAL  
REMAINS THE SAME.

0205125009 KNOW THAT WHEN ENERGY CHANGES FROM ONE FORM TO ANOTHER, THE TOTAL

0205135 ENERGY TRANSFORMATION (ATOMS)

0205135001 KNOW THAT THE EARTH'S MATTER IS BUILT UP OF ATOMS COMBINING

0205135002 KNOW THAT AN ELEMENT IS MADE UP OF ONE KIND OF ATOM, WITH A

MATERIALS TO BUILD AN  
WOULD HAPPEN IF ALL THE

ELECTRICAL CIRCUIT (DRY CELL, COPPER WIRE AND FLASH  
COMPONENTS WERE CONNECTED CORRECTLY.

RSAL.

OF GRAVITATIONAL PULL ON A MASS.

THE LESS ITS GRAVITATIONAL PULL AND THE LESS THE ENERGY WHICH MUST BE USED TO

S, THE GREATER ITS GRAVITATIONAL PULL AND THE GREATER THE ENERGY WHICH MUST

ENERGY MUST BE APPLIED TO OVERCOME THE PULL OF GRAVITATION.

YOU WHEN RELEASED.

ABLE.

ED INTO ENERGY. HOWEVER THE TOTAL AMOUNT OF MATTER AND ENERGY IN THE UNIVERSE

FROM ONE FORM TO ANOTHER. THE TOTAL AMOUNT OF ENERGY REMAINS UNCHANGED.

IS BUILT UP OF ATOMS

COMBINED IN MANY WAYS.

IF ERIC ONE KIND OF ATOM,

WITH A DEFINABLE SET OF PROPE

ATOMS ARE THE

0205135003 TELL OR SHOW BY MODEL THAT ALL MATTER IS COMPOSED OF AT

0205135004 ON A DIAGRAM SHOWING THE PARTS OF AN ATOM, RECOGNIZE THE NU

0205135005 INFER THERE IS NO CHANGE IN WEIGHT AS ATOMS RECOMBINE IN

0205145 ENERGY TRANSFORMATION (CARBON DIOXIDE)

0205145001 EXAMINE THE MAKING OF CARBON DIOXIDE BY YEAST, AND INFER TH

0205145002 DEMONSTRATE YEAST IN SUGAR MAKES CARBON DIOXIDE. PUT PO  
SET 10. MINUTES; BUBBLES TURN LIMewater MILKY.

0205145003 CONSTRUCT CARBON DIOXIDE GENERATOR. USE EGG SHELLS IN VI  
DISPLACEMENT.

0205145004 DEMONSTRATE TEST FOR CARBON DIOXIDE. USE GAS IN ABOVE ACT  
CLOUDY.

0205145005 DEMONSTRATE SIMILARITY OF MILKY LIMewater TO EGGSHELL. CO  
ACTION ON LIMewater.

0205145006 SHOW SOAKED SEEDS MAKE CARBON DIOXIDE. PUT SOAKED LIMA BE  
SQUEEZE GENERATOR; GAS BUBBLES INTO LIMewater, TURNS MI

0205145007 DESCRIBE BUBBLES OF GAS GIVEN OFF AS CARBON DIOXIDE.

0205150 ENERGY TRANSFORMATION (CHEMICAL)

0205150001 KNOW THAT IN CHEMICAL AND PHYSICAL CHANGE, THE TOTAL AM

0205150002 STATE THE CONCEPT THAT IN AN ORDINARY CHEMICAL REACTION MA

MATTER IS COMPOSED OF ATOMS.

AN ATOM, RECOGNIZE THE NUCLEUS, A PROTON, AN ELECTRON, AND A NEUTRON.

AS ATOMS RECOMBINE INTO NEW SUBSTANCES.

OXIDE)

IDE BY YEAST, AND INFER THAT YEAST CELLS ARE ALIVE.

CARBON DIOXIDE. PUT POWDERED YEAST, SUGAR, IN WARM WATER IN GAS GENERATOR;  
LIMEWATER MILKY.

R. USE EGG SHELLS IN VINEGAR IN FLASK; COLLECTS BUBBLES BY WATER

DE. USE GAS IN ABOVE ACTIVITIES; ADD LIMEWATER; MIX; LIMEWATER TURNS

LIMEWATER TO EGGSHELL. COMPARE BUBBLING ACTION OF VINEGAR ON SHELL AND SIMILAR

OXIDE. PUT SOAKED LIMA BEANS ON WET COTTON IN GAS GENERATOR; LET STAND;  
TO LIMEWATER, TURNS MILKY.

AS CARBON DIOXIDE.

CHANGE, THE TOTAL AMOUNT OF MATTER REMAINS UNCHANGED.

INARY CHEMICAL REACTION MATTER IS NEITHER LOST OR GAINED.

0205150003	GAIN AN UNDERSTANDING OF CHEMICAL PROPERTIES AND INFER
0205150004	KNOW THAT CHEMICAL PROPERTIES HELP IN IDENTIFYING A
0205150005	KNOW THAT WORD EQUATIONS HELP TO DESCRIBE A CHEMICAL
0205150006	ESTABLISH THE CHEMICAL TEST FOR DISTINGUISHING ACIDS,
0205150007	DISCOVER THAT LITMUS PAPER IS A CHEMICAL INDICATOR,
0205150008	IDENTIFY SODA AS NEUTRAL, LIMEWATER AS BASIC, LEMON
0205150009	BY DEMONSTRATION CHOOSE WHAT KIND OF SOLUTION CAUSES
0205150010	DEMONSTRATE CHANGING COLOR OF LITMUS PAPER; PLACE PLACE AMMONIA ON PINK AND BLUE LITMUS. PINK TURNS BLUE.
0205150011	DEMONSTRATE TEST FOR ACIDS AND BASES. PLACE SODA, CHANGE BLUE, LIMEWATER TURNS PINK TO BLUE, LEMON TURN
0205150012	KNOW THAT CHEMICAL REACTIONS ARE A DEPENDABLE MEANS OF
0205150013	EXPERIENCE SOME TECHNIQUES A CHEMIST USES IN IDENTIFYING
0205150014	GAIN NEW AND DEEPER UNDERSTANDING OF THE CHEMIST'S 100
0205150015	KNOW 1 0 ATOMS ARE GAINED OR LOST IN A CHEMICAL
0205150016	KNOW THAT IN CHEMICAL CHANGE, MATTER IS NOT DESTROYED,

AL PROPERTIES AND INFER THE EXISTENCE OF MOLECULES.

HELP IN IDENTIFYING A SUBSTANCE.

TO DESCRIBE A CHEMICAL REACTION.

DISTINGUISHING ACIDS, BASES, AND NEUTRAL SUBSTANCES.

CHEMICAL INDICATOR.

WATER AS BASIC; LEMON JUICE AS ACIDIC.

ND OF SOLUTION CAUSES PINK LITMUS TO TURN PINK.

LITMUS PAPER; PLACE VINEGAR ON PINK AND BLUE LITMUS. BLUE TURNS PINK;  
LITMUS. PINK TURNS BLUE.

BASES. PLACE SODA, LIMESWATER, LEMON JUICE ON RED, BLUE LITMUS. SODA WON'T  
PINK TO BLUE, LEMON TURN BLUE TO PINK.

BE A DEPENDABLE MEANS OF TESTING THE PRESENCE OF A SUBSTANCE.

CHEMIST USES IN IDENTIFYING UNKNOWN SUBSTANCES.

NG OF THE CHEMIST'S 100 BUILDING BLOCKS.

OR LOST IN A CHEMICAL CHANGE.

MATTER IS NOT DESTROYED, ONLY CHANGED FROM ONE FORM TO ANOTHER.

0205150017 GIVEN A CHEMICAL CHANGE, SUGGEST VARIABLES THAT COULD AFFECT

0205150018 GIVEN DESCRIPTION OF A PHYSICAL OR CHEMICAL CHANGE, PREDIC.  
CHANGE.

0205150019 GIVEN A SERIES OF SITUATIONS IN WHICH CHANGE HAS TAKEN PLACE,  
CHANGES.

0205150020 WHEN PERFORMING AN EXPERIMENT, RECOGNIZE AND RECORD SIGNS OF

0205150021 CONSTRUCT GAS GENERATOR FROM PAPER MILK CARTON SO THAT SIDES ARE

0205150022 DESCRIBE EGGSHELL AND WHITE SUBSTANCE AS CALCIUM CARBONATE

0205155 ENERGY TRANSFORMATION (COMBUSTION)

0205155001 DEVELOP INSIGHT INTO COMBUSTION AS ANALOGOUS TO CERTAIN KINDS OF

0205160 ENERGY TRANSFORMATION (COMPOUNDS)

0205160001 CHOOSE THE TYPE OF COMPOUNDS FOUND IN THE GREATEST NUMBER

0205160002 KNOW THAT COMPOUNDS CAN BE BROKEN DOWN INTO THE ELEMENTS OF WHICH

0205160003 KNOW THAT COMPOUNDS MAY BE GROUPED BY THEIR CHEMICAL PROPERTIES

0205160004 DEMONSTRATE THE BREAKING DOWN OF A COMPOUND INTO ITS ELEMENTS

ABLES THAT COULD AFFECT THE CHANGE.

CHEMICAL CHANGE, PREDICT EFFECT OF A GIVEN MANIPULATED VARIABLE ON THAT

CHANGE HAS TAKEN PLACE, DESCRIBE THE PHYSICAL CHANGES AND THE CHEMICAL

SIZE AND RECORD SIGNS OF CHEMICAL CHANGE.

BLK CARTON SO THAT SIDES ARE FLEXIBLE AND CAN BE SQUEEZED.

AS CALCIUM CARBONATE,

ALOGOUS TO CERTAIN KINDS OF OXIDATION---FAST OR SLOW.

THE GREATEST NUMBER IN THE EARTH'S CRUST.

IN INTO THE ELEMENTS OF WHICH THEY ARE COMPOSED.

THEIR CHEMICAL PROPERTIES.

MPOUND INTO ITS ELEMENTS USING MERCURIC OXIDE.

0205190 ENERGY TRANSFORMATION (ELEMENTS)  
0205190001 KNOW THAT COMPOUNDS ARE BUILT UP FROM ELEMENTS.  
0205190002 KNOW THAT ALL MATTER IS MADE UP OF ELEMENTS. ALL MATTER IS MADE UP OF PARTICLES.  
0205190003 CHOOSE THE CORRECT NUMBER OF ELEMENTS IN A MULTIPLE CHOICE QUESTION.

0205210 ENERGY TRANSFORMATION (HEAT)  
0205210001 KNOW THAT HEAT IS ONE FORM OF ENERGY THAT CAUSES MOTION OF MOLECULES.  
0205210002 READ A THERMOMETER TO THE NEAREST DEGREE IN EITHER FAHRENHEIT OR CELSIUS.  
0205210003 DEMONSTRATE THE BOILING POINTS OF VARIOUS WATER SOLUTIONS.  
0205210004 IDENTIFY THE BOILING AND FREEZING POINTS OF WATER ON BOTH THE FAHRENHEIT AND CELSIUS SCALES.  
0205210005 DESCRIBE HOW HEAT AFFECTS THE AMOUNT OF SOLID SUBSTANCE THAT WILL MELT.  
0205210006 GIVEN TWO STATES OF MATTER, EXPLAIN WHAT OCCURS WHEN HEAT IS ADDED TO THE MOLECULES BETWEEN THE FIRST AND SECOND STATE AND GIVE THE REASON.  
0205210007 GIVEN A SUBSTANCE, DESCRIBE EFFECT THAT HEAT HAS ON THE VOLUME OF ACTION OR MOTION.

0205246 ENERGY TRANSFORMATION (MOLECULAR)  
0205245001 KNOW THAT A MOLECULE IS THE SMALLEST PARTICLE OF A SUBSTANCE.  
0205245002 DEMONSTRATE HOW MOLECULES OF PERFUME CAN PASS THROUGH RUBBER BALLOON. PUSH IN CLEAN JAR FOR 15 MINUTES. ODOR IS IN JAR.

ON ELEMENTS.

ELEMENTS. ALL MATTER IS MADE UP OF ATOMS. ALL MATTER IS MADE UP OF

TS IN A MULTIPLE CHOICE QUESTION.

Y THAT CAUSES MOTION OF MOLECULES---AND OF GROUPS OF MOLECULES.

EGREE IN EITHER FAHRENHEIT SCALE OR THE CENTIGRADE SCALE,

ARIOUS WATER SOLUTIONS.

INTS OF WATER ON BOTH THE FAHRENHEIT SCALE AND THE CENTIGRADE SCALE,

OF SOLID SUBSTANCE THAT WILL DISSOLVE IN WATER,

WHAT OCCURS WHEN HEAT IS ADDED OR TAKEN AWAY, EXPLAIN WHAT HAS HAPPENED  
AND SECOND STATE AND GIVE THE NAME OF THE PROCESS,

HAT HEAT HAS ON THE VOLUME OF SUBSTANCE AND ON THE SPEED OF THE MOLECULAR

PARTICLE OF A SUBSTANCE WHICH RETAINS THE PROPERTIES OF THE SUBSTANCE,

CAN PASS THROUGH RUBBER BALLOON. PLACE DROPS IN BALLOON, INFLATE, SEAL,  
OR IN JAR.

0205245003

DEMONSTRATE FORMATION OF CRYSTALS. DISSOLVE  $2/3$  CUP OF SUGAR IN  $1/4$  ALLOW LIQUID TO COOL. CRYSTALS FORM ON SOLT.

0205245004

CONSTRUCT MODEL OF DRY ICE ROCKET ENGINE; USE PINT MILK CARTON, THREA

0205245005

DEMONSTRATE MILK CARTON ENGINE: IT REVOLVES AS DRY ICE CONTACTS WATER THROUGH HOLE IN ONE DIRECTION. CARTON REVOLVES IN ANOTHER DIRECTION

0205255

ENERGY TRANSFORMATION (OXIDATION)

0205255001

KNOW THAT OTHER METALS COMBINE WITH OXYGEN TO FORM OXIDES; OXID COMPOSITION.

0205255002

KNOW THAT RUSTING CAN BE PREVENTED BY KEEPING OXYGEN AND IRON ATOMS FROM

0205255003

KNOW THAT RUSTING MAY BE HASTENED BY RAPID RELEASE OF OXYGEN IN A C

0205255004

DEMONSTRATE FORMATION OF RUST. COLLECT OXYGEN AFTER PLACING AN IR SECOND. ALLOW TUBES TO SET TIL RUST FORMS.

0205255005

DESCRIBE RUST THAT FORMS AS A CHEMICAL COMPOUND, IRON OXIDE.

0205255006

KNOW THAT THE PRODUCTION OF CARBON DIOXIDE IS EVIDENCE OF OXIDATION

0205255007

INVESTIGATE OXIDATION IN SEVERAL EXAMPLES OF LIVING THINGS.

0205255008

KNOW THAT OXYGEN IS AN ACTIVE ELEMENT; IT COMBINES READILY WITH COMPOUNDS.

0205255009

KNOW THAT IN OXIDATION, MATTER IS NEITHER GAINED NOR LOST.

3. DISSOLVE  $\frac{2}{3}$  CUP OF SUGAR IN  $\frac{1}{4}$  CUP BOILING WATER. SUSPEND BOLT IN LIQUID; FORM ON BOLT.

4. ENGINE; USE PINT MILK CARTON, THREAD, TOOTHPICK, CLAY, WATER, DRY ICE.

IT REVOLVES AS DRY ICE CONTACTS WATER. PRODUCES CARBON DIOXIDE. IT ESCAPES  
CARTON REVOLVES IN ANOTHER DIRECTION.

5. WITH OXYGEN TO FORM OXIDES; OXIDES CAN BE IDENTIFIED BY THEIR CHEMICAL

6. PREVENTED BY KEEPING OXYGEN AND IRON ATOMS FROM COMBINING.

7. CAUSED BY RAPID RELEASE OF OXYGEN IN A CHEMICAL REACTION.

8. TO COLLECT OXYGEN AFTER PLACING AN IRON NAIL IN ONE TEST TUBE, STEEL WOOL IN  
RUST FORMS.

9. CHEMICAL COMPOUND, IRON OXIDE.

10. CARBON DIOXIDE IS EVIDENCE OF OXIDATION WITHIN LIVING THINGS.

11. EXAMPLES OF LIVING THINGS:

12. ELEMENT; IT COMBINES READILY WITH MANY OTHER ELEMENTS TO FORM MANY OXYGEN

13. IS NEITHER GAINED NOR LOST.

0205260

**ENERGY TRANSFORMATION (OXYGEN)**

0205260001

CONSTRUCT OXYGEN GAS GENERATOR. USE PLASTIC TUBING, FLASK, CLAY-  
BUBBLES OF OXYGEN PASS THROUGH WATER. WATER DISPLACED FROM TUBE.

0205260002

DEMONSTRATE USE OF APPARATUS TO COLLECT OXYGEN.

0205270

**ENERGY TRANSFORMATION (SOLAR)**

0205270001

KNOW THAT THE STORED ENERGY OF THE SUN IS TRANSFORMED INTO OTHER K  
ON THE PAST AS WELL AS ON THE PRESENT.

0205285

**ENERGY TRANSFORMATION (WATER)**

0205285001

DEMONSTRATE FORCE OF ICE. FILL PLASTIC CONTAINER WITH WATER, TAP O  
OPEN.

0205290

**EROSION**

0205290001

KNOW THAT WEATHERING AND EROSION BREAK DOWN THE HARDEST ROCK.

0205290002

KNOW THAT PLANTS ARE AGENTS OF EROSION.

0205290003

KNOW THAT WIND AND WATER ARE AGENTS OF EROSION.

0205290004

KNOW THAT WEATHERING AND EROSION HELP BUILD UP NEW LAND.

0205290005

KNOW THAT THE ACTION OF WATER SORTS OUT SOIL PARTICLES, WHICH SETTLE  
ROCKS.

0205290006

EXPLAIN THE DIFFERENCE BETWEEN WEATHERING AND EROSION AND GIVE EXA  
THE EARTH.

USE PLASTIC TUBING, FLASK, CLAY- 3 PER CENT HYDROGEN PEROXIDE, YEAST,  
WATER DISPLACED FROM TUBE.  
COLLECT OXYGEN.

SUN IS TRANSFORMED INTO OTHER KINDS OF ENERGY; MAN'S ENVIRONMENT DEPENDS  
ON IT.

PLASTIC CONTAINER WITH WATER, TAP ON LID, FREEZE WATER, LID WILL BE FORCED  
DOWN.

BREAK DOWN THE HARDEST ROCK.

EROSION.

CAUSES OF EROSION.

HOW THEY HELP BUILD UP NEW LAND.

HOW THEY SORT SOIL PARTICLES, WHICH SETTLE IN LAYERS AND EVENTUALLY FORM SEDIMENTARY  
ROCK.

WATERING AND EROSION AND GIVE EXAMPLES OF HOW EACH BREAK DOWN AND BUILD UP.

0205295

FISH

0205295001

CONSTRUCT AN AQUARIUM SYSTEM BY ESTABLISHING A TANK

CONTAINING WA

0205295002

DEMONSTRATE THAT TEMPERATURE OF WATER CHANGES LESS  
MEASURE CHANGES IN AIR AND WATER DURING ENVIRONMENTAL

RAPIDLY THAN  
TEMPERATURE OF

0205295003

OBSERVE A FISH AND EXPLAIN HOW ITS STRUCTURE ADAPTS IT

TO ITS ENVIR

0205295004

DESCRIBE ADAPTATIONS OF FISH FOR LIFE ACTIVITIES AS  
BY OBSERVING FISH IN AN AQUARIUM AND BY READING

MOVEMENT, GET  
REFERENCES.

0205300

FORCE AND MOTION

0205300001

KNOW THAT PRESSURE CAUSES MATTER TO MOVE.

0205300002

KNOW THAT ENERGY MUST BE SUPPLIED TO DEVELOP A FORCE

SUFFICIENT TO

0205300003

THROUGH INVESTIGATION, DEDUCE THAT ENERGY IS NECESSARY  
IS AN UNBALANCED FORCE.

TO SUPPLY A F

0205300004

FROM OBSERVATION, REASON THAT ENERGY OF MOTION (AN  
TO CREATE THRUST.

UNBALANCED FO

0205300005

FROM OBSERVATION OF AN EXPERIMENT, RECOGNIZE PROOF WHICH SHOWS THAT TO  
(WEIGHT) AN EQUAL AMOUNT OF FORCE IS NEEDED.

0205300006

DESCRIBE SPRING BALANCE AS A FORCE OF GRAVITATION METER

AND READING F

0205300007

DEMONSTRATE FORCE OF GRAVITY EXERTS PULL ON OBJECT.

SUSPEND OBJEC

0205300008

INFER THAT EVERY ACTION HAS AN OPPOSITE AND EQUAL

REACTION.

0205300009

DEMONSTRATE PRINCIPLE THAT EVERY ACTION HAS AN EQUAL AND OPPOSITE REAC

ESTABLISHING A TANK CONTAINING WATER, SAND, PLANTS, AND FISH,  
 WATER CHANGES LESS RAPIDLY THAN TEMPERATURE OF AIR BY USING THERMOMETERS TO  
 DURING ENVIRONMENTAL TEMPERATURE CHANGES.  
 ITS STRUCTURE ADAPTS IT TO ITS ENVIRONMENT.  
 LIFE ACTIVITIES AS MOVEMENT, GETTING FOOD, GETTING AIR, AND REPRODUCTION,  
 AND BY READING REFERENCES.  
 TO MOVE.  
 TO DEVELOP A FORCE SUFFICIENT TO OVERCOME GRAVITATIONAL PULL.  
 THAT ENERGY IS NECESSARY TO SUPPLY A FORCE THAT STARTS AN OBJECT MOVING. THIS  
 ENERGY OF MOTION (AN UNBALANCED FORCE) REACTS AGAINST THE GRAVITATIONAL PULL  
 IT, RECOGNIZE PROOF WHICH SHOWS THAT TO ACT AGAINST CERTAIN GRAVITATIONAL FORCE  
 IS NEEDED.  
 FORCE OF GRAVITATION METER AND READING FOR EACH OBJECT AS MEASURE OF PULL.  
 EXERTS PULL ON OBJECT. SUSPEND OBJECTS FROM SPRING BALANCES. POINTER MOVES.  
 OPPOSITE AND EQUAL REACTION.  
 ACTION HAS AN EQUAL AND OPPOSITE REACTION.

0205300010 DESCRIBE ABOVE ACTION AS EXAMPLE OF NEWTON'S LAW OF ACTION

0205300011 USE THE LAW OF ACTION AND REACTION BY RESPONDING TO GIVEN

0205300012 GAIN INSIGHT INTO INERTIA OF REST AND INERTIA OF MOTION BY EX

0205300013 INFER THAT OBJECTS IN MOTION TEND TO MOVE IN A STRAIGHT LINE  
SPACECRAFT INTO ORBIT AROUND THE EARTH.

0205300014 KNOW THAT ENERGY MUST BE APPLIED TO PRODUCE AN UNBAL  
MOTION.

0205300015 MATCH WORDS AND PHRASES WITH THEIR DEFINITION PERTAINING TO MO

0205300016 IDENTIFY ACCEPTABLE DEFINITIONS FOR THE TERMS FORCE, INERT

0205300017 RECOGNIZE EXAMPLES OF INERTIA SHOWN IN EXPERIMENTS.

0205300018 USE THE LAW OF INERTIA IN AN EXPLANATION OF A SITUATION USING

0205300019 KNOW THAT ALL OBJECTS ATTRACT ONE ANOTHER BY THE FORCE OF GR

0205300020 KNOW THAT AN OBJECT AT REST REMAINS AT REST AND AN OBJECT  
UNBALANCED FORCE.

0205300021 KNOW THAT MOTION IS A FORM OF CHANGE.

0205300022 IDENTIFY VARIABLES WHICH AFFECT THE SWING OF A PENDULUM AND T

AMPLE OF NEWTON'S LAW OF ACTION AND REACTION.

REACTION BY RESPONDING TO GIVEN QUESTIONS.

OF REST AND INERTIA OF MOTION. BY EXAMINING FAMILIAR OBJECTS.

ON TEND TO MOVE IN A STRAIGHT LINE BUT THAT SOME FORCE (GRAVITATIONAL) PULLS A  
ND THE EARTH.

PLIED TO PRODUCE AN UNBALANCED FORCE, RESULTING IN MOTION OR CHANGE OF

IN THEIR DEFINITION PERTAINING TO MOTION OR THE CHANGE IN MOTION.

IONS FOR THE TERMS FORCE, INERTIA, AND WEIGHT.

IA SHOWN IN EXPERIMENTS.

IN EXPLANATION OF A SITUATION USING BOOKS AND BICYCLES.

ACT ONE ANOTHER BY THE FORCE OF GRAVITATION.

REMAINS AT REST AND AN OBJECT IN MOTION REMAINS IN MOTION UNLESS ACTED ON BY AN

OF CHANGE.

AFFECT THE SWING OF A PENDULUM AND TELL HOW THE SWING IS AFFECTED BY THESE VARIABLES.

0205310

GENETICS

0205310001

STUDY AND RESEARCH THE PART THAT CHROMOSOMES PLAY IN CHANGES IN

0205310002

KNOW THAT THE PATTERN OF THE ORGANISM IS PASSED ALONG TO NEW CELLS BY CONTENT.

0205310003

CONCEPTUALIZE CHROMOSOME PAIRING BY MAKING AND MANIPULATING

0205315

GEOLOGY

0205315001

CONSTRUCT MODEL OF EARTH. FILL BALLOON WITH TOOTHPASTE; FORM MODELIN

0205315002

IDENTIFY PARTS OF MODEL TO REPRESENT LAYERS OF EARTH AS CRUST, MANTL

0205315003

DEMONSTRATE HOW LAYERS OF SEDIMENT FORMED. MIX WATER, PEBBLES, GRA PARTICLES ACCUMULATE NEAR BOTTOM.

0205315004

DESCRIBE THIS ACTIVITY AS A MODEL OF HOW LAYERS OF SEDIMENT FOR

0205315005

KNOW THAT THE EARTH IS CONTINUALLY CHANGING.

0205315006

LEARN ABOUT EARTH'S INTERIOR BY MAKING A DIAGRAMMATIC MODEL.

0205315007

RELATE THE EARTH'S STRUCTURE TO A THREE DIMENSIONAL MODEL.

0205315008

KNOW THAT HEAT AND PRESSURE GENERATED WITHIN THE EARTH RESULT IN CH

0205315009

KNOW THAT BREAKING UP OF RADIOACTIVE ATOMS WITHIN THE EARTH RELEASE PRESSURE.

0205315010

KNOW THAT PRESSURES ON AND WITHING THE EARTH UPLIFT THE EARTH'S CRUS

ST CHROMOSOMES PLAY IN CHANGES IN THE STRUCTURE OF LIVING THINGS.  
 ORGANISM IS PASSED ALONG TO NEW CELLS BY DUPLICATION OF CHROMOSOMES AND THEIR DNA  
 BY MAKING AND MANIPULATING MODELS.

BALLOON WITH TOOTHPASTE; FORM MODELING CLAY AROUND BALLOON.

PRESENT LAYERS OF EARTH AS CRUST, MANTLE, CORE.

MENT FORMED, MIX WATER, PEBBLES, GRAVEL, SAND AND ALLOW TO SETTLE; HEAVY  
 M,

DEL OF HOW LAYERS OF SEDIMENT FORM IN OCEANS,

ALLY CHANGING.

MAKING A DIAGRAMMATIC MODEL.

A THREE DIMENSIONAL MODEL.

ERATED WITHIN THE EARTH RESULT IN CHANGES OF ITS SURFACE.

ACTIVE ATOMS WITHIN THE EARTH RELEASES ENORMOUS HEAT, CREATING TREMENDOUS

ING THE EARTH UPLIFT THE EARTH'S CRUST.

0205315011	RELATE INSIDE AND OUTSIDE PRESSURES TO MOUNTAIN	BUILDING.
0205315012	RELATE PRESSURES TO THE BENDING OF ROCK LAYERS.	
0205315013	DISCOVER THAT ROCKS MAY BE GROUPED BY THEIR ORIGIN.	
0205315014	KNOW THAT THE COMPOSITION OF THE EARTH'S ROCKS IS	DETERMINED
0205315015	KNOW THAT ROCKS MAY BE IDENTIFIED BY THEIR MINERAL	COMPOSITION
0205315016	MAKE A ROCK COLLECTION NAMING AND CLASSIFYING EACH	ROCK.
0205315017	DEMONSTRATE THE HARDNESS OF VARIOUS MINERALS BY USING	A SCALE FOR
0205315018	CONSTRUCT A SCALE OF RELATIVE HARDNESS FROM SEVERAL	MINERALS.
0205315019	RELATE OIL DEPOSITS TO SEDIMENTATION IN ANCIENT TIMES.	
0205315020	DO INDEPENDENT RESEARCH ON HOW THE STORED ENERGY FROM	THE SUN IS
	PAST IMPORTANT TO THE PRESENT.	
0205320	HUMAN BODY (BEHAVIOR)	
0205320001	GIVEN A SIMPLE GRAPH ON WHICH A SERIES OF TEST SCORES	HAS BEEN P
	BETWEEN TESTS.	
0205320002	GIVEN LIST OF ORDINARY, EVERYDAY ACTS PERFORMED BY	ANIMALS AND
	THOSE THAT ARE LEARNED AND THOSE THAT ARE UNLEARNED	(REFLEX).
0205320003	GIVEN SEVERAL WAYS OF IMPROVING A LEARNED BEHAVIOR,	RECOGNIZE
	PROGRESS IN GIVEN PERIOD OF TIME, AND CHOOSE REASON WHY	YOUR CHOICE

PRESSURES TO MOUNTAIN

BUILDING.

ENDING OF ROCK LAYERS.

GROUPED BY THEIR ORIGIN,

OF THE EARTH'S ROCKS IS

DETERMINED BY THE MANNER IN WHICH THEY WERE FORMED.

IDENTIFIED BY THEIR MINERAL

COMPOSITION.

ING AND CLASSIFYING EACH

ROCK.

VARIOUS MINERALS BY USING

A SCALE FOR MEASURING HARDNESS.

IVE HARDNESS FROM SEVERAL

MINERALS.

IMENTATION IN ANCIENT TIMES.

HOW THE STORED ENERGY FROM  
ENT.

THE SUN IS TRANSFORMED INTO COAL AND OIL, MAKING THE

CH A SERIES OF TEST SCORES

HAS BEEN PLOTTED, EXPLAIN THE REASONS THE SCORES CHANGED

ERYDAY ACTS PERFORMED BY  
THOSE THAT ARE UNLEARNED

ANIMALS AND HUMAN BEINGS, RECOGNIZE DIFFERENCE BETWEEN  
(REFLEX).

OVERIC  
LEARNED BEHAVIOR,  
AND CHOOSE REASON WHY

RECOGNIZE ONE WHICH WOULD HELP YOU SHOW THE MOST  
YOUR CHOICE IS A GOOD ONE.

0205320004	DEMONSTRATE DIFFERENCE (DISCRIMINATE) BETWEEN A STIMULUS AND A RESPONSE	
0205320005	DEMONSTRATE IN A GIVEN EXPERIMENT INVOLVING STIMULUS AND RESPONSE IN CONTROLLED AND THE ONES THAT ARE CHANGED.	
0205320006	RECOGNIZE FROM GROUPS OF WORDS OR NUMBERS ONE GROUP WHICH WOULD REASON WHY GROUP YOU SELECTED IS EASIEST TO REMEMBER.	
0205320007	GIVEN LIST OF THINGS WHICH ARE PRESENT IN A PLACE OF STUDY, EXPLAIN PREVENT LEARNING AND THOSE WHICH WILL PREVENT LEARNING.	
0205320008	GIVEN AN EXPERIMENT ON PRACTICE AND MEMORIZATION, RECOGNIZE EXPERIMENT.	
0205320009	GIVEN A LIST OF VARIABLES THAT WERE CONTROLLED IN AN EXPERIMENT REASONS THEY WERE CONTROLLED.	
0205320010	EXPLAIN WAYS IN WHICH A GIVEN VARIABLE WAS CONTROLLED IN AN EXPERIMENT	
0205320011	EXPLAIN WAYS IN WHICH A GIVEN VARIABLE WAS CONTROLLED IN AN EXPERIMENT	
0205320012	EXPLAIN WHICH VARIABLES WERE CONTROLLED IN AN EXPERIMENT ON FORGETTING	
0205320013	GIVEN DESCRIPTION OF LEARNING SITUATION, RECOGNIZE THOSE VARIABLES LEARN AND THOSE VARIABLES THAT MIGHT BOTHER YOU OR SLOW DOWN YOUR RATE	
0205320014	GIVEN SEVERAL WAYS OF LEARNING, PREDICT WHICH YOU THINK WOULD LEAD THROUGH EXPERIMENTAL PROCEDURES.	
0205320015	GIVEN DIFFERENT FORMS OF GRAPHS SHOWING TEST SCORES, EXPLAIN WHY INTERPRET WHAT THE SCORES MEAN.	
0205320016	GIVEN DIFFERENT FORMS OF GRAPHS SHOWING TEST SCORES, EXPLAIN WHY INTERPRET WHAT THE SCORES MEAN.	

CRIMINATE) BETWEEN A STIMULUS AND A RESPONSE IN A GIVEN SITUATION.

MENT INVOLVING STIMULUS AND RESPONSE IN LIVING THINGS, THE VARIABLES THAT ARE  
ARE CHANGED.

OR NUMBERS ONE GROUP  
IS EASIEST TO REMEMBER.

WHICH WOULD PROBABLY BE MOST EASILY MEMORIZED; EXPLAIN

RE PRESENT IN A PLACE OF  
WHICH WILL PREVENT LEARNING.

STUDY, EXPLAIN DIFFERENCE BETWEEN THOSE WHICH WILL NOT

CE AND MEMORIZATION,

RECOGNIZE THE VARIABLES THAT WERE CONTROLLED IN THE

AT WERE CONTROLLED IN AN

EXPERIMENT ON PRACTICE AND MEMORIZATION, EXPLAIN THE

VARIABLE WAS CONTROLLED

IN AN EXPERIMENT ON PRACTICE AND MEMORIZATION.

VARIABLE WAS CONTROLLED IN AN EXPERIMENT ON PRACTICE AND MEMORIZATION.

CONTROLLED IN AN EXPERIMENT ON FORGETTING AND RELEARNING.

SITUATION, RECOGNIZE  
AT MIGHT BOTHER YOU OR SLOW

THOSE VARIABLES THAT MIGHT MAKE IT EASIER FOR YOU TO  
DOWN YOUR RATE OF LEARNING.

NG, PREDICT WHICH YOU THINK  
RES.

WOULD LEAD TO BEST RESULTS AND TEST YOUR PREDICTION

PHS SHOWING TEST SCORES,  
AN.

EXPLAIN WHICH FORMS CAN BE COMPARED MOST EASILY AND

PHS SHOWING TEST SCORES,  
AN.

EXPLAIN WHICH FORMS CAN BE COMPARED MOST EASILY AND

0205325

HUMAN BODY (CIRCULATORY)

0205325001

KNOW THAT THE CIRCULATORY SYSTEM WORKS IN CONJUNCTION WITH THE CELLS WITH SUBSTANCES THEY NEED.

0205335

HUMAN BODY (DIET)

0205335001

KNOW THAT CERTAIN DISEASES ARE AVOIDED OR CURED BY ADEQUATE

0205335002

INFER THE IMPORTANCE OF HAVING A BALANCED DIET EVERY DAY.

0205335003

REALIZE THE NEED FOR FOODS RICH IN CERTAIN SUBSTANCES.

0205335004

INFER THE NUTRITIONAL VALUES OF FOOD SUBSTANCES IN MILK.

0205335005

MAKE A POSTER SHOWING VITAMINS AND THEIR SOURCES.

0205340

HUMAN BODY (DIGESTIVE)

0205340001

KNOW THAT DIGESTION BEGINS AS FOOD IS BROKEN INTO SMALLER

0205340002

KNOW THAT OUR DIGESTIVE ORGANS MAKE OUR FOOD READY TO MOVE TH

0205340003

KNOW THAT THE ORGANS OF THE DIGESTIVE SYSTEM WORK TOGETHE

0205340004

DESCRIBE THAT SUBSTANCE IN SALIVA IS RESPONSIBLE FOR CHANGIN

0205340005

COMPLETE AN INVESTIGATION USING BENEDICT'S SOLUTION TO SHOW HO

0205340006

DEMONSTRATE HOW STARCH IS CHANGED TO SUGAR. TEST AND SHOW AB  
SOLUTION, SALIVA, PRESENCE IN STARCH AND SALIVA SOLUTION (SET FO

SYSTEM WORKS IN CONJUNCTION WITH THE DIGESTIVE AND RESPIRATORY SYSTEMS TO PROVIDE  
THEY NEED.

ARE AVOIDED OR CURED BY ADEQUATE AMOUNTS OF VITAMINS.

EATING A BALANCED DIET EVERY DAY.

DEFICIENCY IN CERTAIN SUBSTANCES.

DEFICIENCY OF FOOD SUBSTANCES IN MILK.

DEFICIENCIES AND THEIR SOURCES.

FOOD IS BROKEN INTO SMALLER PARTICLES.

ENZYMES MAKE OUR FOOD READY TO MOVE THROUGH MEMBRANES.

DIGESTIVE SYSTEM WORK TOGETHER.

SALIVA IS RESPONSIBLE FOR CHANGING STARCH TO SUGAR.

ADDING BENEDICT'S SOLUTION TO SHOW HOW SALIVA BREAKS DOWN STARCH.

CHANGING STARCH TO SUGAR. TEST AND SHOW ABSENCE OF SUGAR WITH BENEDICT'S SOLUTION IN STARCH.  
MIX STARCH AND SALIVA SOLUTION (SET FOR 10 MINUTES).

0205340007 REPORT WRITTEN OR ORALLY WHAT HAPPENS TO FOOD IN THE MOUTH, STO

0205390 HUMAN BODY (NERVOUS)

0205390001 KNOW THAT THE NERVOUS SYSTEM SERVES TO COORDINATE THE SYSTEMS OF

0205410 HUMAN BODY (RESPIRATORY)

0205410001 THROUGH OBSERVATION, INFER THAT RATES OF BREATHING MAY DIFFER.

0205410002 KNOW THAT THE AMOUNT OF AIR THAT CAN BE INHALED IS DETERMINED

0205410003 READ A CHART TO DETERMINE DIFFERENCES IN INHALED AND EXHALED AI

0205410004 DISTINGUISH RATE OF BREATHING FROM OTHERS, COMPARE RATES.

0205410005 DESCRIBE RATE OF BREATHING. COUNT NUMBER OF TIMES HE INHALES IN

0205410006 CONSTRUCT TABLE OF BREATHING RATES. INDICATE NUMBER OF CHILDREN A

0205410007 DEVISE AN INVESTIGATION TO HELP ANSWER THE FOLLOWING QUESTION:

0205410008 DEVISE AN INVESTIGATION TO HELP ANSWER THE FOLLOWING QUESTION:

0205410009 DEVISE AN INVESTIGATION TO HELP ANSWER THE FOLLOWING QUESTION:  
RATE OF BREATHING?

0205410010 KNOW THAT ALTHOUGH THE AMOUNT OF OXYGEN IN FRESH AIR REMAINS AB  
LESS.

WHAT HAPPENS TO FOOD IN THE MOUTH, STOMACH, AND INTESTINES.

WHAT SERVES TO COORDINATE THE SYSTEMS OF THE BODY.

WHAT RATES OF BREATHING MAY DIFFER.

WHAT THAT CAN BE INHALED IS DETERMINED BY THE EXPANSION OF THE LUNGS.

DIFFERENCES IN INHALED AND EXHALED AIR.

HOW DIFFERENT FROM OTHERS. COMPARE RATES.

HOW TO COUNT NUMBER OF TIMES HE INHALES IN ONE MINUTE.

HOW TO MEASURE RATES. INDICATE NUMBER OF CHILDREN AND DIFFERENT RATES.

HOW TO HELP ANSWER THE FOLLOWING QUESTION: DOES EVERYONE INHALE AT THE SAME RATE?

HOW TO HELP ANSWER THE FOLLOWING QUESTION: DOES EXERCISE AFFECT BREATHING RATE?

HOW TO HELP ANSWER THE FOLLOWING QUESTION: CAN YOU DETERMINE AN AVERAGE OR NORM IN THE

HOW MUCH OXYGEN IN FRESH AIR REMAINS ABOUT THE SAME, THE AMOUNT IN EXHALED AIR IS

0205410011

KNOW THAT THE ORGANS OF THE RESPIRATORY SYSTEM ARE SO STRUCTURED TO PROVIDE A CONTINUOUS SUPPLY OF OXYGEN.

0205415

HUMAN BODY (SKELETAL)

0205415001

KNOW THAT THE SKELETAL AND MUSCULAR SYSTEMS PROVIDE THE BODY SUPPORT AND PROTECTION.

0205425

HUMAN BODY (SYSTEMS)

0205425001

VISUALIZE THE BODY AS MORE THAN A MASS OF CELLS--RATHER AS AN ORGANIZED WHOLE.

0205425002

KNOW THAT THE ORGAN SYSTEMS WORK TOGETHER IN PERFORMING THE BODY'S FUNCTIONS.

0205425003

KNOW THAT THE EXCRETORY SYSTEM ENABLES THE OTHER SYSTEMS TO MAINTAIN CELL OXIDATION.

0205430

HUMAN BODY (TEMPERATURE)

0205430001

CONSTRUCT A TABLE OF TEMPERATURE READINGS COLLECTED, OUTDOORS AND INDOORS, INDICATING THE EFFECT OF ENVIRONMENTAL CHANGES.

0205430002

DEMONSTRATE BODY'S ADAPTATION FOR STEADY TEMPERATURE BY MEASURING TEMPERATURE OVER A WEEK SHOWING THAT BODY TEMPERATURE VARIES LITTLE COMPARED TO ENVIRONMENTAL TEMPERATURE.

0205430003

OBSERVE, INVESTIGATE, AND ANALYZE THE IMPORTANCE OF AN EVEN BODY TEMPERATURE FOR LIFE.

0205450

INTERDEPENDENCE

0205450001

KNOW THAT ANIMALS ARE DEPENDENT ON THE OXYGEN GREEN PLANTS PROVIDE.

RESPIRATORY SYSTEM ARE SO STRUCTURED THAT THEY PROVIDE THE BODY CELLS WITH A

MUSCULAR SYSTEMS. PROVIDE THE BODY SUPPORT AND PROTECTION AND ENABLE IT TO MOVE ABOUT.

NOT A MASS OF CELLS--RATHER AS AN ORGANIZED STRUCTURE.

THEY WORK TOGETHER IN PERFORMING THE BODY'S FUNCTIONS.

THEY ENABLE THE OTHER SYSTEMS TO MAINTAIN A BALANCE BY REMOVING UNDESIRABLE WASTES OF

TEMPERATURE READINGS COLLECTED, INDICATING DAY OF READING AND AIR AND BODY TEMPERATURES,

FOR STEADY TEMPERATURE BY MEASURING BODY AND AIR TEMPERATURES, IN- AND OUTDOOR FOR  
TEMPERATURE VARIES LITTLE COMPARED TO AIR TEMPERATURE.

ANALYZE THE IMPORTANCE OF AN EVEN BODY TEMPERATURE.

0205450002 GAIN INSIGHT INTO THE INTERDEPENDENCE OF ORGANISMS AND THEIR ENV

0205450003 KNOW THAT LIVING THINGS OBTAIN FROM ONE ANOTHER AND FROM THE ENVIR  
GROWTH AND ACTIVITY.

0205450004 REALIZE THAT ANIMALS AND PLANTS IN A SEALED ENVIRONMENT DEPEND UP  
CYCLE IS ESSENTIAL IN THEIR ENVIRONMENT.

0205450005 CONSTRUCT A SEALED-IN MODEL USING FISH AND PLANT LIFE TO SHOW T  
ABLE TO RELATE THIS MODEL TO THE SEALED-IN ENVIRONMENT OF THE EA

0205450006 KNOW THAT INTERDEPENDENCE OF LIVING THINGS WITH THEIR ENVIRONME  
IN A CHEMICAL CHANGE.

0205450007 KNOW THAT WAYS OF LIFE TODAY ARE RELATED TO THE INTERDEPE  
ENVIRONMENT.

0205450008 REASON FROM PRIOR WORK THAT ANIMAL FIBERS ARE DEPENDENT ON EARLIE

0205455 LIGHT

0205455001 DISCOVER HOW MIRRORS COLLECT LIGHT.

0205455002 KNOW THAT A TELESCOPE MIRROR SERVES TO COLLECT LIGHT.

0205455003 KNOW THAT LIGHT COLLECTED BY A CURVED MIRROR CAN BE BROUGHT T

0205455004 KNOW THAT LENSES AND PRISMS CAN CHANGE THE DIRECTION OF LIGHT.

0205455005 DEMONSTRATE THAT LIGHT WILL BOUNCE AT AN ANGLE OR STRAIGHT  
DIFFERENT ANGLES ONTO A MIRROR.

0205455006 MAKE A WORKABLE MODEL OF A PERISCOPE.

DEPENDENCE OF ORGANISMS AND THEIR ENVIRONMENTS.

FROM ONE ANOTHER AND FROM THE ENVIRONMENT THE MATTER AND ENERGY THEY NEED FOR

IN A SEALED ENVIRONMENT DEPEND UPON ONE ANOTHER; THE OXYGEN-CARBON-DIOXIDE ENVIRONMENT.

ING FISH AND PLANT LIFE TO SHOW THE INTERDEPENDENCE OF ALL LIVING THINGS, BEING THE SEALED-IN ENVIRONMENT OF THE EARTH.

LIVING THINGS WITH THEIR ENVIRONMENT IS RELATED TO THE TRANSFORMATION OF MATTER

ARE RELATED TO THE INTERDEPENDENCE OF ORGANISMS THAT LIVED IN AN ANCIENT

IMAL FIBERS ARE DEPENDENT ON EARLIER CAPTURE OF ENERGY BY GREEN PLANTS.

IGHT.

SERVES TO COLLECT LIGHT.

A CURVED MIRROR CAN BE BROUGHT TO A FOCUS AND MAGNIFIED BY A LENS.

AN CHANGE THE DIRECTION OF LIGHT.

OUNCE AT AN ANGLE OR STRAIGHT BACK TO THE SOURCE, BY SHINING A FLASHLIGHT AT

- 0205455007 KNOW THAT LIGHT TRAVELS IN STRAIGHT LINES. IT CAN BE BROKEN IN A PRISM.
- 0205455008 DO AN INVESTIGATION WITH A PRISM TO SHOW THAT WHITE LIGHT IS COMPOSED OF A SPECTRUM THAT THE SPECTRUM HAS A SET PATTERN.
- 0205455009 NAME THE COLOR OF THE BANDS AS RED, ORANGE, YELLOW, GREEN, BLUE, VIOLET.
- 0205455010 DEMONSTRATE THAT BANDS OF COLORED LIGHT ARE FORMED AS SUNLIGHT IS REFRACTED BY A PRISM.
- 0205455011 KNOW THAT LIGHT CAN BE REFLECTED BY MIRRORS.
- 0205455012 DISCOVER THAT LIGHT MOVES IN A STRAIGHT LINE.
- 0205455013 DEMONSTRATE USING A LONG TUBE THAT LIGHT TRAVELS IN A STRAIGHT LINE.
- 0205455014 KNOW THAT PARTS OF THE LIGHT SPECTRUM ARE INVISIBLE; THEIR EXISTENCE IS PROVEN BY THEIR EFFECTS.
- 0205455015 UNDERSTAND THE SHORTNESS OF WAVELENGTHS OF LIGHT.
- 0205455016 WRITE OR DISCUSS THIS TOPIC, 'THE WAVE THEORY OF LIGHT,' THIS SHOULD INCLUDE WAVE LENGTHS.
- 0205455017 KNOW THAT THE BEHAVIOR OF LIGHT MAY BE EXPLAINED AS THE MOTION OF WAVES.
- 0205455018 INFER THAT THE NUMBER OF WAVES IS RELATED TO THE LENGTH OF THE WAVELENGTH.
- 0205455019 KNOW THAT LIGHT BEHAVES AT TIMES AS PARTICLES, AND AT TIMES AS WAVES.
- 0205455020 EXAMINE AN EXAMPLE OF LIGHT BEHAVING AS PARTICLES RATHER THAN AS WAVES.

STRAIGHT LINES. IT CAN BE BROKEN INTO A SPECTRUM OF COLORS AS IT PASSES THROUGH A PRISM TO SHOW THAT WHITE LIGHT IS MADE OF MANY DIFFERENT COLORS OF LIGHT, AND IT PATTERN. COLORS AS RED, ORANGE, YELLOW, GREEN, BLUE, AND VIOLET, AND THE TOTAL PATTERN SPECTRUM. COLORED LIGHT ARE FORMED AS SUNLIGHT PASSES THROUGH A GLASS PRISM.

LECTED BY MIRRORS.

IN A STRAIGHT LINE.

HTUBE THAT LIGHT TRAVELS IN A STRAIGHT LINE.

EXHT SPECTRUM ARE INVISIBLE; THEIR EXISTENCE CAN BE INFERRED FROM THEIR EFFECTS.

F WAVELENGTHS OF LIGHT,

HO C, 'THE WAVE THEORY OF LIGHT,' THIS SHOULD INCLUDE THE KNOWLEDGE OF COLORS RELATED TO

OF LIGHT MAY BE EXPLAINED AS THE MOTION OF WAVES THROUGH SPACE.

WAVES IS RELATED TO THE LENGTH OF THE WAVE.

AS TIMES AS PARTICLES, AND AT TIMES AS WAVES.

S T BEHAVING AS PARTICLES RATHER THAN AS WAVES (ELECTRICAL ENERGY).

- 0205455021 WRITE OR DISCUSS THIS TOPIC, 'THE PARTICLE THEORY OF LIGHT.'
- 0205455022 RELATE WAVELENGTH TO THE COLOR SPECTRUM.
- 0205455023 COMPARE THE TWO THEORIES OF LIGHT AND BECOME AWARE THAT MORE EVIDENCE
- 0205455024 GIVEN TWO PIECES OF EVIDENCE, A AND B, DECIDE WHICH THEORY OF
- 0205455025 KNOW THAT THE LIGHT FROM THE STARS ENABLES US TO DETERMINE
- 0205455026 DEDUCE THAT DIFFERENT ELEMENTS PRODUCE DIFFERENT FLAME COLORS.
- 0205455027 INFER THAT LIGHT FROM THE STARS WAS EMITTED AT SOME TIME IN THE PAST
- 0205455028 KNOW THAT DISTANCES IN SPACE CAN BE MEASURED ACCURATELY BY USING TELESCOPES
- 0205455029 DESCRIBE THAT LIGHT WAVES OR RADIO WAVES CAN BE USED TO MEASURE DISTANCES BY TAKING REFLECTIONS OFF A DISTANT OBJECT.
- 0205455030 FIGURE WHAT A LIGHT YEAR IS USING MATH CONCEPTS.
- 0205455031 RECOGNIZE IN MULTIPLE CHOICE SITUATION THE SPEED OF LIGHT.
- 0205455032 OBSERVE OR PERFORM AN INVESTIGATION OF A FLAME SHOWING COLORS PRODUCED
- 0205455033 DEMONSTRATE FLAME TEST FOR IDENTIFYING CHEMICAL SUBSTANCES BY OBSERVING AN OPEN FLAME CAUSING DIFFERENT COLORS TO BE FORMED AS THEY BURN.

THE PARTICLE THEORY OF LIGHT.

COLOR SPECTRUM.

LIGHT AND BECOME AWARE THAT MORE EVIDENCE IS NEEDED.

A AND B, DECIDE WHICH THEORY OF LIGHT BEST EXPLAINS EACH.

THE STARS ENABLES US TO DETERMINE THEIR COMPOSITION AND THEIR TEMPERATURE.

FLAMES PRODUCE DIFFERENT FLAME COLORS.

LIGHT WAS EMITTED AT SOME TIME IN THE PAST.

DISTANCES CAN BE MEASURED ACCURATELY BY USING THE SPEED OF LIGHT AS A YARDSTICK.

RADIO WAVES CAN BE USED TO MEASURE DISTANCES IN SPACE, BY MEASURING THE TIME IT TAKES TO REACH A DISTANT OBJECT.

USING MATH CONCEPTS.

IN THIS SITUATION THE SPEED OF LIGHT.

AN INVESTIGATION OF A FLAME SHOWING COLORS PRODUCED WHEN DIFFERENT SUBSTANCES ARE PRESENT.

IDENTIFYING CHEMICAL SUBSTANCES BY HOLDING DIFFERENT CHEMICAL POWDERS IN AN FLAME AND NOTICING WHAT COLORS TO BE FORMED AS THEY BURN.

0205465	MACHINES (COMPLEX)	
0205465001	COMPARE POWER MACHINES WITH MANUAL MACHINES TO SHOW	ADVANTAGE
0205470	MACHINE (SIMPLE)	
0205470001	COMBINING SEVERAL OF THE SIX SIMPLE MACHINES (INCLINED PLANE, SC	DESIGN AND BUILD A WORKING MODEL.
0205475	MAMMALS	
0205475001	KNOW THAT THE MAMMALS HAVE BEEN MORE SUCCESSFUL IN THEIR ADAPTATIO	
0205475002	KNOW THAT MAMMALS ARE ADAPTED FOR THE PROTECTION AND	CARE OF T
0205475003	UNDERSTAND THE IMPORTANT RELATIONSHIP BETWEEN CHANGES IN STRUCTURE	CHANGES IN CHROMOSOMES.
0205480	MAGNETS	
0205480001	GIVEN GROUP OF OBJECTS AND A MAGNET, PREDICT WHICH OF	THE OBJEC
	TEST YOUR PREDICTIONS IN EXPERIMENTAL PROCEDURES.	
0205480002	GIVEN A MAGNET AND GROUP OF MATERIALS (E.G., PAPER,	CARDBOARD
	MATERIALS ARE MAGNETICALLY TRANSPARENT.	
0205480003	GIVEN TWO MARKED BAR MAGNETS, RECOGNIZE THE POLES WHICH	ATTRACT E
0205480004	GIVEN A MAGNET, DEMONSTRATE THE PATTERN OF ITS LINES OF	FORCE.

TH MANUAL MACHINES TO SHOW ADVANTAGES OR DISADVANTAGES OF EACH.

SIX SIMPLE MACHINES (INCLINED PLANE, SCREW, WEDGE, LEVER, PULLEY, WHEEL, AND AXLE).  
G MODEL.

VE BEEN MORE SUCCESSFUL IN THEIR ADAPTATIONS THAN HAVE OTHER FORMS OF LIVING THINGS.

PTED FOR THE PROTECTION AND CARE OF THEIR YOUNG.

RELATIONSHIP BETWEEN CHANGES IN STRUCTURE AND FUNCTION OF THE BODY (ADAPTATION) AND

ND A MAGNET, PREDICT WHICH OF THE OBJECTS ARE MAGNETIC AND WHICH ARE NONMAGNETIC.  
EXPERIMENTAL PROCEDURES.

OF MATERIALS (E.G., PAPER, CARDBOARD, PLASTIC GLASS, TIN), DEMONSTRATE WHICH  
LY TRANSPARENT.

NETS, RECOGNIZE THE POLES WHICH ATTRACT EACH OTHER AND THE POLES WHICH REPEL EACH OTHER.

ATE THE PATTERN OF ITS LINES OF FORCE.

0205485

MEALWORMS

0205485001

RECOGNIZE BODY PARTS OF A MEALWORM (ANTENNA, HEAD, MOUTH, LEG, FUNCTIONS.

0205495

MICROORGANISMS

0205495001

PLAN FOR COLLECTING, CULTURING, AND STUDYING PROTOZOANS.

0205495002

KNOW THAT PROTOZOANS MOVE AND GATHER FOOD IN DIFFERENT WAYS.

0205495003

DESCRIBE MOVEMENT AND FEEDING OF LIFE IN DROP OF POND WATER. USE

0205495004

DISTINGUISH BETWEEN LIFE FOUND IN DROP OF WATER AND IN WATER FROM SU

0205500

MICROSCOPE TECHNIQUE

0205500001

USE A COMPOUND MICROSCOPE BY SETTING UP AND FOCUSING IT FOR VIEWING A

0205500002

GIVEN A MICROSCOPE, A SLIDE, AND A SIMPLE SKETCH, LABEL SKETCH ACCORD  
RECORD THE MAGNIFICATION USED.

0205500003

GIVEN LIST OF DIRECTIONS, PREPARE A SLIDE FOR VIEWING FROM THE FOLL  
SLIP, A SPECIMEN (SUCH AS POND WATER).

0205500004

DEMONSTRATE HOW TO PLACE A COVER SLIP ON DROP OF WATER (POND) ON MIC

0205500005

DEMONSTRATE USE OF MICROSCOPE. PLACE IN FOCUS SLIDE PREPARED EARL

0205545

PLANTS (GROWTH)

MEALWORM (ANTENNA, HEAD, MOUTH, LEG, THORAX, ABDOMEN) AND DESCRIBE THEIR

URING, AND STUDYING PROTOZOANS.

AND GATHER FOOD IN DIFFERENT WAYS.

ING OF LIFE IN DROP OF POND WATER. USE MICROSCOPE.

FOUND IN DROP OF WATER AND IN WATER FROM SURFACE OF POND MUD. USE MICROSCOPE.

BY SETTING UP AND FOCUSING IT FOR VIEWING AT A GIVEN POWER.

DE, AND A SIMPLE SKETCH, LABEL, SKETCH ACCORDING TO WHAT YOU OBSERVE ON THE SPECIMEN, USED.

PREPARE A SLIDE FOR VIEWING FROM THE FOLLOWING MATERIALS: A GLASS SLIDE, A COVER POND WATER).

A COVER SLIP ON DROP OF WATER (POND) ON MICROSCOPE SLIDE. DO NOT TRAP AIR BUBBLES.

COPE. PLACE IN FOCUS SLIDE PREPARED EARLIER.

- 0205545001 KNOW THAT DURING PHOTOSYNTHESIS (THE MANUFACTURE OF CARBOH
- 0205545002 CONSTRUCT AN HYPOTHESIS CONCERNING THE REACTIONS IN A PLANT
- 0205545003 OPERATIONALLY DEFINE PHOTOSYNTHESIS AND CHLOROPHYLL,
- 0205545004 KNOW THAT DURING PHOTOSYNTHESIS, GREEN PLANTS MANUFA  
OF LIGHT.
- 0205545005 PERFORM AN INVESTIGATION SHOWING THE PRODUCTION OF OXYGEN  
FOR THIS PROCESS.
- 0205545006 DISCOVER THAT MANY OF OUR FOODS COME FROM PLANTS. CELLS SPECIAL
- 0205545007 KNOW THAT GREEN PLANTS MAKE CARBOHYDRATES FROM CARBON DIOXIDE  
PLANTS FOR THEIR FOOD.
- 0205545008 KNOW THAT PLANTS MAKE AND STORE FATS.
- 0205545009 KNOW THAT PLANTS MAKE AND STORE PROTEINS.
- 0205545010 KNOW THAT GREEN PLANTS ARE A BASIC SOURCE FOR MANY SUBSTAN
- 0205545011 LIST THE FOOD SUBSTANCE AND GASES PRODUCED DURING PHOTOSY
- 0205545012 KNOW THAT PLANTS ARE A SOURCE OF FOOD SUBSTANCES THAT KEEP US

0205550 PLANTS (HYBRIDS)

0205550001 GIVEN DUPLICATES OF SEEDS, PLANTS, OR FRUITS, TRY TO IMPROVE

PHOTOSYNTHESIS (THE MANUFACTURE OF CARBOHYDRATES), GREEN PLANTS PRODUCE OXYGEN,

CONCERNING THE REACTIONS IN A PLANT THAT MIGHT PRODUCE CARBOHYDRATES.

PHOTOSYNTHESIS AND CHLOROPHYLL.

PHOTOSYNTHESIS, GREEN PLANTS MANUFACTURE SIMPLE SUGARS AND STARCHES, USING THE ENERGY

SHOWING THE PRODUCTION OF OXYGEN DURING PHOTOSYNTHESIS AND THE NECESSITY OF LIGHT

FOODS COME FROM PLANTS CELLS SPECIALIZED FOR STORAGE OF CARBOHYDRATES.

THE CARBOHYDRATES FROM CARBON DIOXIDE AND WATER. ANIMALS ARE DEPENDENT ON GREEN

STORE FATS.

STORE PROTEINS.

A BASIC SOURCE FOR MANY SUBSTANCES NEEDED BY ALL ANIMAL LIFE.

THE GASES PRODUCED DURING PHOTOSYNTHESIS.

SOURCE OF FOOD SUBSTANCES THAT KEEP US WELL.

OR FRUITS, TRY TO IMPROVE THE QUALITY BY SELECTION, GRAFTING, OR BUDDING.

0205560 PLANTS (NEEDS)

0205560001 KNOW THAT GREEN PLANTS CAN DIRECTLY TRAP AND STORE THE ENERGY OF

0205560002 KNOW THAT LIGHT IS ESSENTIAL FOR THE MANUFACTURE OF CARBOHYDRATE

0205560003 KNOW THAT THE CAPTURE OF RADIANT ENERGY BY GREEN PLANTS IS BASIC THINGS.

0205560004 DESCRIBE THAT PRESENCE OF LIGHT NECESSARY FOR PHOTOSYNTHESIS

0205560005 INFER THE SOURCES OF THE CARBON, OXYGEN, AND HYDROGEN IN A GREEN PLANT

0205560006 DEMONSTRATE STARCH ABSENT IN LEAF 1/2 COVERED FOR 3 DAYS, PREPARED WITH HEATED ALCOHOL AND TEST WITH IODINE SOLUTION.

0205570 PLANTS (PARTS)

0205570001 CONSTRUCT 'RUBBING' OF LEAF. PLACE LEAF, FACE DOWN UNDER PAPER

0205570002 DESCRIBE THAT LEAF SKELETON IS MADE OF CELLULOSE AND GIVES LEAF ITS

0205610 REPRODUCTION

0205610001 KNOW THAT ORGANISMS REPRODUCE OTHER ORGANISMS LIKE THEMSELVES

0205615 REPTILES (EXTINCT)

0205615001 RESEARCH HOW CHANGES OF ENVIRONMENT AFFECTED DINOSAURS.

LY TRAP AND STORE THE ENERGY OF SUNLIGHT.

THE MANUFACTURE OF CARBOHYDRATES BY CELLS IN A GREEN LEAF.

ENERGY BY GREEN PLANTS IS BASIC TO THE GROWTH AND MAINTENANCE OF ALL LIVING

NECESSARY FOR PHOTOSYNTHESIS TO FORM STARCH IN GREEN PLANTS.

OXYGEN, AND HYDROGEN A GREEN PLANTS USES IN PHOTOSYNTHESIS.

1/2 COVERED FOR 9 DAYS, PRESENT IN UNCOVERED HALF, REMOVE CHLOROPHYLL  
IODINE SOLUTION.

CE LEAF, FACE DOWN UNDER PAPER, RUB CRAYON OVER OUTLINE OF LEAF.

DE OF CELLULOSE AND GIVES LEAF STRENGTH AND STIFFNESS.

ER ORGANISMS LIKE THEMSELVES.

NT AFFECTED DINOSAURS.

0205615002 KNOW THAT FURTHER ADAPTATIONS LED TO DOMINANCE BY THE DINOSAURS;  
DISAPPEARANCE.

0205620 SCIENTIFIC METHOD

0205620001 APPRECIATE THE PROBLEMS THAT INTEREST A SCIENTIST AND SOME OF THE

0205620002 ASSOCIATE SCIENCE WITH EVIDENCE AND REASONING.

0205620003 DESIGN EXPERIMENT SHOWING RELATIONSHIP BETWEEN TIME IT TAKES FOR S  
TEMPERATURE. USE THESE STEPS: 1, HYPOTHESIS, 2, DESIGN, 3.

0205620004 EXAMINE INFERENCES ON WHICH A THEORY IS BUILT AND REALIZE THA

0205620005 IN RESPONSE TO A REQUEST TO DO SO, DESCRIBE DESIGNS THAT WOULD BE AP  
MODEL CAN BE USED TO EXPLAIN A GIVEN PHENOMENON.

0205620006 CONSTRUCT A DIAGRAM WITH LABELS TO DEMONSTRATE THAT MORE THAN O  
GIVEN MODEL.

0205630 SOLAR SYSTEM

0205630001 CONSTRUCT MODEL OF SUN-EARTH-MOON SYSTEM.

0205630002 GIVEN THE PROPERTIES OF THE PLANETS OF OUR SOLAR SYSTEM, ORDER AT LE  
OR NUMBER OF MOONS.

0205630003 GIVEN THE PROPERTIES OF THE PLANETS, COMPARE THE KNOWN PHYSICAL FE

0205630004 CONSTRUCT DIAGRAM OF ELLIPTICAL SHAPE OF EARTH'S ORBIT. USE PAPER,  
ACCORDING TO ARRANGEMENT IN TEXT.

0205630005 DEMONSTRATE MOVING THUMB TACKS FARTHER APART CAUSES MORE ELONGATED E  
CIRCLE.

TIONS LED TO DOMINANCE BY THE DINOSAURS; FAILURE TO ADAPT TO CHANGES LED TO THEIR

THAT INTEREST A SCIENTIST AND SOME OF THE METHODS HE USES IN TRYING TO SOLVE THEM.

EVIDENCE AND REASONING.

THE RELATIONSHIP BETWEEN TIME IT TAKES FOR SUBSTANCE TO DISSOLVE IN WATER AND  
STEPS: 1. HYPOTHESIS, 2. DESIGN, 3. RECORD OF OBSERVATIONS, 4. CONCLUSIONS.

WHICH A THEORY IS BUILT AND REALIZE THAT EVERY THEORY MUST BE TESTED BY EVIDENCE.

TO DO SO, DESCRIBE DESIGNS THAT WOULD BE APPROPRIATE TO ILLUSTRATE THAT MORE THAN ONE  
CAN EXPLAIN A GIVEN PHENOMENON.

USE LABELS TO DEMONSTRATE THAT MORE THAN ONE MODEL CAN SOMETIMES BE USED TO EXPLAIN A

EARTH-MOON SYSTEM.

THE PLANETS OF OUR SOLAR SYSTEM, ORDER AT LEAST THREE PLANETS ACCORDING TO COLOR, SIZE,

THE PLANETS, COMPARE THE KNOWN PHYSICAL FEATURES OF TWO PLANETS.

OPTICAL SHAPE OF EARTH'S ORBIT. USE PAPER, PENCIL, RULER, 2 THUMB TACKS, STRING  
IN TEXT.

Moving FARTHER APART CAUSES MORE ELONGATED ELLIPSE; MOVE TOGETHER MAKES ORBIT MORE LIKE

0205630006	CONSTRUCT HYPOTHESIS OF WHAT ELLIPSE WILL LOOK LIKE IF	THUMB TACK
0205630007	DESCRIBE THAT TIME IS LEFT FOR EARTH TO ROTATE, MORE REVOLVE AROUND SUN.	FOR MOON
0205630008	KNOW THAT BODIES IN SPACE, AS WELL AS THEIR MATTER AND	ENERGY, A
0205630009	KNOW THAT THE EARTH IS IN CONSTANT MOTION.	
0205630010	KNOW THAT BODIES IN SPACE, AS WELL AS THEIR MATTER AND	ENERGY, A
0205630011	KNOW THAT TO ALTER THE PATH OF A BODY IN SPACE, ENERGY GRAVITATIONAL PULL AND INERTIAL MOTION.	MUST BE A
0205630012	KNOW THAT INERTIA AND GRAVITATION AFFECT THE PATH OF	BODIES TR
0205630013	KNOW THAT THE MASSES OF THE SUN AND THE PLANETS DIFFER;	HENCE, TH
0205630014	INTER THE NEWTON'S LAWS OF GRAVITATION AND MOTION HELP	EXPLAIN T
0205630015	SENSE HOW SCIENTISTS AND ENGINEERS CAN PREDICT ORBITS.	
0205630016	KNOW THAT THE POSITION AND MOTION OF THE MOON ARE	AFFECTED
0205630017	KNOW THAT EXPLORATION OF THE MOON DEPENDS UPON SPACE ARE AFFECTED BY GRAVITATION AND INERTIAL MOTION.	UNDERSTAN
0205630018	KNOW THAT ROTATION AND REVOLUTION DIFFER FOR DIFFERENT	BODIES IN
0205630019	SENSE SOME RELATIONSHIPS BETWEEN DISTANCES AND TIME IN	SPACE TRA

ECLIPSE WILL LOOK LIKE IF THUMB TACKS ARE MOVED CLOSER OR FARTHER,  
 EARTH TO ROTATE, MORE FOR MOON TO REVOLVE AROUND EARTH, GREATEST FOR EARTH TO  
 WELL AS THEIR MATTER AND ENERGY, ARE IN CONSTANT CHANGE.  
 ANANT MOTION.  
 WELL AS THEIR MATTER AND ENERGY, ARE IN CONSTANT CHANGE.  
 A BODY IN SPACE, ENERGY MUST BE APPLIED TO AFFECT THE RELATIONSHIP BETWEEN  
 MOTION.  
 ON AFFECT THE PATH OF BODIES TRAVELING IN SPACE.  
 AND THE PLANETS DIFFER; HENCE, THEIR GRAVITATIONAL PULLS DIFFER.  
 ITATION AND MOTION HELP EXPLAIN THE ORIGIN OF THE SOLAR SYSTEM.  
 ERS CAN PREDICT ORBITS.  
 ON OF THE MOON ARE AFFECTED BY GRAVITATION AND INERTIAL MOTION,  
 ON DEPENDS UPON UNDERSTANDING HOW THE POSITION AND MOTION OF BODIES IN  
 ON AND INERTIAL MOTION.  
 ON DIFFER FOR DIFFERENT BODIES IN SPACE.  
 N DISTANCES AND TIME IN SPACE TRAVEL.

0205630020 DISCOVER THAT ENORMOUS DISTANCES IN SPACE REQUIRE A NEW UNIT OF  
0205630021 REASON OUT A METHOD FOR MEASURING THE DISTANCE TO OBJECTS  
0205630022 RELATE THEIR KNOWLEDGE OF THE LAWS OF MOTION TO A MOON LAUNCH  
0205630023 KNOW THAT THE FLIGHT OF A SPACECRAFT TO THE MOON IS AFFECTED  
0205630024 FIGURE HIS WEIGHT IF ONE COULD GET COMPLETELY AWAY FROM GRAVITY  
0205630025 GIVE CORRECT ANSWERS ABOUT ONE'S MASS ON THE MOON.  
0205630026 GIVE AN EXAMPLE OF HOW ONE WOULD FIGURE ONE'S WEIGHT ON THE MOON

0205635 SOLAR SYSTEM (STARS)

0205635001 BECOME AWARE OF THE ENORMOUS TEMPERATURES OF STARS.

0205635002 KNOW THAT THE STARS ARE CONTINUALLY CHANGING.

0205635003 EXPLAIN WHAT A SPECTROSCOPE TELLS US ABOUT THE TEMPERATURE

0205635004 DEMONSTRATE OR TELL HOW WE KNOW THAT THE STARS MOVE.

0205635005 DEMONSTRATE THAT A TELESCOPE MUST MOVE TO STAY POINTED AT THE  
AT NORTH STAR WITH SHUTTER OPEN THREE HOURS CAUSING CURVED

ANCES IN SPACE REQUIRE A NEW UNIT OF MEASUREMENT.

URING THE DISTANCE TO OBJECTS IN SPACE.

E LAWS OF MOTION TO A MOON LAUNCH AND LANDING.

ACECRAFT TO THE MOON IS AFFECTED BY GRAVITATION.

D GET COMPLETELY AWAY FROM GRAVITATION.

NE'S MASS ON THE MOON.

OULD FIGURE ONE'S WEIGHT ON THE MOON.

TEMPERATURES OF STARS.

INUALLY CHANGING.

TELLS US ABOUT THE TEMPERATURE AND SUBSTANCES IN A STAR.

NOW THAT THE STARS MOVE.

MUST MOVE TO STAY POINTED AT THE SAME STAR BY USING CAMERA REMAINING MOTIONLESS  
OPEN THREE HOURS CAUSING CURVED TRACKS OF LIGHT ON FILM.

0205655

UNIVERSE

0205655001

KNOW THAT THE UNIVERSE IS IN CONSTANT CHANGE.

0205655002

KNOW THAT COMPONENT BODIES OF THE UNIVERSE ARE IN CONS

0205655003

GIVEN APPROPRIATE REFERENCE MATERIALS, MAKE AN OUTLINE OF T

0205655004

REPORT IN ORAL OR WRITTEN FORM ON THIS TOPIC, 'A RULER FOR  
DEMONSTRATIONS OR DRAWINGS.

0205665

WEATHER

0205665001

WHEN PRESENTED WITH A LIST OF TERMS CONCERNING WEATHER, CORR  
TERMS RELATING TO WEATHER AND WEATHER CONDITIONS.

0205685

WEATHER (PREDICTION)

0205685001

CONSTRUCT A WEATHER CHART BASED ON THE DATA TAKEN FROM AN A  
WIND AT A GIVEN TIME.

0205685002

CONSTRUCT A WEATHER CHART BASED ON THE DATA TAKEN FROM A TIDE  
GIVEN TIME.

0205685003

CONSTRUCT A WEATHER CHART BASED ON THE DATA TAKEN FROM AN A

0205685004

FROM OBSERVATIONS AND WEATHER KNOWLEDGE, INTERPRET INFO

CONSTANT CHANGE.

OF THE UNIVERSE ARE IN CONSTANT MOTION.

MATERIALS, MAKE AN OUTLINE OF THE MANY COMPONENT PARTS OF THE UNIVERSE.

FORM ON THIS TOPIC, 'A RULER FOR THE UNIVERSE,' AND SUPPORT THE REPORT WITH

OF TERMS CONCERNING WEATHER, CORRECTLY DEFINE IN WRITING TEN OUT OF FIFTEEN OF THESE  
AND WEATHER CONDITIONS.

BASED ON THE DATA TAKEN FROM AN AEROVANE TO SHOW THE VELOCITY AND DIRECTIONS OF THE

BASED ON THE DATA TAKEN FROM A TIDE GAUGE TO SHOW THE RISE AND FALL OF THE TIDES AT A

BASED ON THE DATA TAKEN FROM AN ANEMOMETER.

PER KNOWLEDGE, INTERPRET INFORMATION SHOWN IN A TABLE OR A GRAPH.

0206010 ADAPTATION (BEHAVIOR)

0206010001 KNOW THAT A LIVING THING IS THE PRODUCT OF ITS HEREDITY AND

0206010002 KNOW THAT BEHAVIOR MAY BE INBORN AND INVOLUNTARY.

0206010003 KNOW THAT RESPONSES TO STIMULI MAY BE SIMPLE OR COMPLEX.

0206010004 KNOW THAT BEHAVIOR CONSISTS OF RESPONSES TO CHANGES (S)

0206010005 KNOW THAT A RESPONSE MAY BE CHANGED BY SUBSTITUTING A NEW  
STIMULUS.

0206010006 KNOW THAT HABITS AND LEARNING RESULT FROM INTERACTION OF

0206010007 THE CHILD WILL DEMONSTRATE A CONDITIONED REFLEX BY CON  
LIGHT, WHEN FED) UNTIL THE FISH RESPONDS WITHOUT FOOD.

0206015 ADAPTATION (DEFENSE)

0206015001 KNOW THAT ORGANISMS ARE STRUCTURALLY ADAPTED FOR DEFENSE AGAINST

0206025 ADAPTATION (HABITAT)

0206025001 KNOW THAT LIVING THINGS ARE ADAPTED BY STRUCTURE AND FUNCTION

0206025002 KNOW THAT LIVING ORGANISMS HAVE STRUCTURES THAT ENABLE THEM TO

0206025003 KNOW THAT AN ORGANISM'S SPECIALIZED STRUCTURES ENABLE IT TO

0206025004 KNOW THAT HEREDITY AND ENVIRONMENT WORK TOGETHER.

PRODUCT OF ITS HEREDITY AND ENVIRONMENT.

AND INVOLUNTARY.

BE SIMPLE OR COMPLEX.

RESPONSES TO CHANGES (STIMULI) IN THE ENVIRONMENT.

AND BY SUBSTITUTING A NEW STIMULUS AND ASSOCIATING IT WITH THE ORIGINAL

IT FROM INTERACTION OF INHERITED STRUCTURES WITH STIMULI.

CONDITIONED REFLEX BY CONDITIONING A FISH TO RESPOND TO A STIMULUS (SUCH AS A  
SPONDS WITHOUT FOOD.

LY ADAPTED FOR DEFENSE AGAINST HOSTILE MICROORGANISMS IN THEIR ENVIRONMENT.

ED BY STRUCTURE AND FUNCTION TO THEIR ENVIRONMENT.

STRUCTURES THAT ENABLE THEM TO RESPOND TO STIMULI IN THEIR ENVIRONMENT.

ED STRUCTURES ENABLE IT TO INTERACT WITH THE ENVIRONMENT.

WORK TOGETHER.

0206025005 KNOW THAT THE ENVIRONMENT FOR GROWTH OF VIRUSES DIFFERS FROM THA

0206030 ADAPTATION (MAN)

0206030001 KNOW THAT CHEMICAL TECHNOLOGY HAS PROVIDED MANY SUBSTANC

0206030002 KNOW THAT MAN CHANGES THE ENVIRONMENT OF VIRUSES IN SEEKING

0206030003 KNOW THAT MAN ATTEMPTS TO MANAGE HIS ENVIRONMENT,

0206030004 INFER THAT THE CONQUEST OF DISEASE IS A COOPERATIVE EFFORT,

0206030005 KNOW THAT MODERN TECHNOLOGY USES CONCEPTS OF SCIENCE TO FREE THE

0206030006 KNOW THAT MAN CHANGES THE ENVIRONMENT OF MICROORGANISMS AS HE SE

0206090 CLASSIFY (MATTER)

0206090001 KNOW THAT THERE ARE HIDDEN LIKENESSES IN MATTER.

0206090002 KNOW THAT MATTER CAN UNDERGO CHANGE.

0206090003 GIVEN A LIST OF EARLY THEORIES ON MATTER, MATCH EACH THEORY W  
BOYLE, DEMOCRITUS, AND EMPEDOCLES).

0206090004 CLASSIFY COMMON SUBSTANCES AS ELEMENTS OR COMPOUNDS WHEN GIV

0206090005 CLASSIFY SUBSTANCES (E.G., SUGAR, SALT, GLASS) AS CRYSTALL  
OR DRAWING OF THE MOLECULAR ARRANGEMENTS.

FOR GROWTH OF VIRUSES DIFFERS FROM THAT OF OTHER LIVING THINGS.

GY HAS PROVIDED MANY SUBSTANCES WITH USEFUL PROPERTIES.

ENVIRONMENT OF VIRUSES IN SEEKING TO CONQUER DISEASE.

MANAGE HIS ENVIRONMENT.

DISEASE IS A COOPERATIVE EFFORT.

USES CONCEPTS OF SCIENCE TO FREE THE ENVIRONMENT OF HARMFUL MICROORGANISMS.

ENVIRONMENT OF MICROORGANISMS AS HE SEEKS TO CONQUER DISEASE.

IKENESSES IN MATTER.

CHANGE.

ES ON MATTER, MATCH EACH  
OCLES).

S ELEMENTS OR COMPOUNDS

UGAR, SALT, GLASS) AS  
AF MENTS.

THEORY WITH THE SCIENTIST WHO FURTHERED IT (DALTON,

WHEN GIVEN SYMBOLS, FORMULAS, OR MODELS.

CRYSTALLINE OR NONCRYSTALLINE WHEN GIVEN A DESCRIPTION

0206110

CLOTH

0206110001

KNOW THAT SILK FIBERS ARE MADE BY A LIVING ANIMAL.

0206110002

KNOW THAT KNOWLEDGE OF MOLECULAR STRUCTURE ENABLES MAN TO INVENT

0206110003

KNOW THAT FIBERS ARE MADE OF COMMON ELEMENTS.

0206110004

KNOW THAT ATOMS CAN BE REARRANGED IN MOLECULES TO FORM FIBERS

0206120

ELECTRICITY

0206120001

APPLY INFORMATION ON THE STRUCTURE OF THE ATOM IN EXPLAINING

0206120002

EXPLAIN HOW THE PROCESSES OF 'INDUCTION' AND 'ELECTRON TRANSFER'

0206120003

EXPLAIN HOW ATTRACTION AND REPULSION BETWEEN CHARGED OBJECTS ON THE OBJECTS.

0206120004

DESCRIBE VARIABLES THAT AFFECT EXPERIMENTS ON STATIC ELECTRICITY

0206120005

DESCRIBE SOME VARIABLES THAT AFFECT EXPERIMENTS ON STATIC ELECTRICITY

0206120006

KNOW THAT FRICTION MAY TRANSFER ELECTRONS, GIVING OBJECTS

0206120007

THE CHILD WILL DEMONSTRATE A FORCE OF ATTRACTION BY RUBBING A ROD OF TISSUE PAPER TO CLING TO THE ROD.

0206120008

KNOW THAT STATIC ELECTRICITY IS STORED ENERGY; CURRENT ELECTRICITY

0206120009

KNOW THAT METALS ARE GOOD CONDUCTORS.

MADE BY A LIVING ANIMAL.

ECULAR STRUCTURE ENABLES MAN TO INVENT NEW FIBERS WITH IMPROVED PROPERTIES,

OF COMMON ELEMENTS,

ARRANGED IN MOLECULES TO FORM FIBERS WITH SPECIAL PROPERTIES.

STRUCTURE OF THE ATOM IN

EXPLAINING STATIC ELECTRICITY.

OF 'INDUCTION' AND 'ELECTRON

TRANSFER' ARE USED TO DEVELOP STATIC CHARGES ON OBJECTS

REPULSION BETWEEN CHARGED

OBJECTS ARE RELATED TO THE KINDS OF ELECTRICAL CHARGES

FECT EXPERIMENTS ON STATIC

ELECTRICITY AND EXPLAIN THE EFFECT.

AT AFFECT EXPERIMENTS ON

STATIC ELECTRICITY AND EXPLAIN THE EFFECT.

NSFER ELECTRONS, GIVING

OBJECTS AN ELECTRIC CHARGE.

A FORCE OF ATTRACTION BY  
THE ROD.

RUBBING A PLASTIC ROD WITH A WOOL CLOTH, CAUSING PIECES

TY IS STORED ENERGY; CURRENT ELECTRICITY IS KINETIC ENERGY.

ONDUCTORS.

- 0206120010 KNOW THAT ELECTRIC ENERGY CAN BE CHANGED INTO OTHER
- 0206120011 KNOW THAT THE ENERGY GOTTEN OUT OF MOVING ELECTRONS IS MOVE THROUGH A CIRCUIT.
- 0206120012 KNOW THAT A MAGNET MOVING IN A COIL OF WIRE INDUCES A CAN BE INCREASED.
- 0206120013 DEMONSTRATE EXISTANCE OF ELECTRIC CURRENT USING THE GALVANOMETER POINTER TO MOVE AS THE MAGNET IS MOVED
- 0206120014 DEMONSTRATE INCREASING THE CURRENT BY USING A STRONGER MORE WINDINGS IN THE COIL RATHER THAN FEWER WINDINGS.
- 0206120015 KNOW THAT A WIRE THROUGH WHICH ELECTRONS ARE FLOWING
- 0206120016 KNOW THAT A STRONGER MAGNET MAY BE MADE BY CONVERTING
- 0206120017 KNOW THAT THE ENERGY OF MOVING ELECTRONS CAN BE USED TO
- 0206120018 DEMONSTRATE SUBSTANCES VARY IN THEIR ABILITY TO CONDUCT CONDUCTIVITY OF VARIOUS METALS CAUSING A LAMP TO LIGHT.
- 0206120019 CONSTRUCT A CIRCUIT TESTER BY CONNECTING DRY CELL CAUSING THE LAMP TO LIGHT WHEN THE CIRCUIT IS COMPLETED.
- 0206120020 KNOW THAT MAGNETISM AND MECHANICAL ENERGY TOGETHER FLOW OF ELECTRONS CAN BE CONVERTED INTO A STEADY
- 0206120021 LOCATE AND IDENTIFY THE PARTS (CORE, COIL, SOURCE) OF AN ONE.
- 0206120022 DEMONSTRATE HOW STRENGTH OF MAGNETIC FIELD PRODUCED BY WIRE AROUND THE CORE.
- 0206120023 APPLY PRINCIPLES OF ELECTROMAGNETISM WHEN YOU MAKE A PEOPLE.

CAN BE CHANGED INTO OTHER KINDS OF ENERGY.  
 OUT OF MOVING ELECTRONS IS NEVER GREATER THAN THE ENERGY PUT INTO MAKING ELECTRONS  
 A COIL OF WIRE INDUCES A FLOW OF ELECTRONS IN THE WIRE; THIS FLOW OF ELECTRONS  
 ELECTRIC CURRENT USING GALVANMETER, COIL OF WIRE AND A STRONG MAGNET, CAUSING  
 MOVE AS THE MAGNET IS MOVED THROUGH THE COIL.  
 CURRENT BY USING A STRONGER MAGNET, USING FASTER RATHER THAN SLOWER MOVEMENTS AND  
 RATHER THAN FEWER WINDINGS.  
 EACH ELECTRON IS FLOWING HAS A MAGNETIC FIELD.  
 MAY BE MADE BY CONVERTING ELECTRIC ENERGY INTO A MAGNETIC FORCE.  
 NG ELECTRONS CAN BE USED TO DO WORK.  
 IN THEIR ABILITY TO CONDUCT ELECTRICITY, BY USING A CIRCUIT TESTER TO CHECK  
 ALS CAUSING A LAMP TO LIGHT.  
 Y CONNECTING DRY CELL TERMINALS, THREE PIECES OF WIRE AND A LAMP AND SOCKET  
 WHEN THE CIRCUIT IS COMPLETED.  
 ANICAL ENERGY TOGETHER PROVIDE A STRONG AND STEADY FLOW OF ELECTRONS; THIS  
 NVERTED INTO A STEADY FORCE TO DO WORK.  
 S (CORE, COIL, SOURCE) OF AN ELECTROMAGNET WHEN GIVEN A DESCRIPTION OR DIAGRAM OF  
 MAGNETIC FIELD PRODUCED BY AN ELECTROMAGNET IS AFFECTED BY THE NUMBER OF TURNS OF  
 MAGNETISM WHEN YOU MAKE A SIMPLE ELECTROMAGNET. DEMONSTRATE ITS USE TO A GROUP OF

0206120024 KNOW THAT IN AN ELECTRIC BELL, ELECTRIC ENERGY DOES WORK IN MO

0206120025 CONSTRUCT ELECTRIC BELL. MAKE COIL OF 100 TURNS OF WIRE.  
VOLT DRY CELLS.

0206120026 DEMONSTRATE HOW TO CONNECT DRY CELLS AND WIRE TO ELECT

0206120027 DEMONSTRATE OPERATION OF ELECTRIC BELL. RING IT WHEN KNIFE

0206120028 NAME PARTS OF ELECTRIC BELL.

0206120029 DESCRIBE HOW AN ELECTRIC BELL WORKS BY OBSERVING MECHA  
OF CURRENT.

0206120030 KNOW THAT ELECTRIC ENERGY CAN BE CONVERTED TO SOUND ENERG

0206120031 MAKE WORKING MODEL OF TELEGRAPH. MAKE COIL AND KEY. USE W

0206120032 DEMONSTRATE OPERATION OF TELEGRAPH. SOUNDER MAKES CLICK

0206120033 MAKE WORKING MODEL OF TELEPHONE TRANSMITTER. USE SUGAR BOX,  
EAPPHOE, AND FOUR 1.5 VOLT DRY CELLS.

0206120034 DEMONSTRATE OPERATION OF TELEPHONE TRANSMITTER. SPEAK INTO  
VOICE.

0206120035 DEMONSTRATE HOW TELEPHONE RECEIVER CHANGES ELECTRICITY TO SO  
CELL. IRON DISC VIBRATES AND MAKES SOUND WAVES.

0206120036 KNOW THAT AN ELECTRIC MOTOR TRANSFERS AND MULTIPLIES A FORCE

0206120037 MAKE WORKING MODEL OF ELECTRIC MOTOR. MAKE ARMATURE AND COILS  
VOLT DRY CELLS.

RIC BELL, ELECTRIC ENERGY DOES WORK IN MOVING AN OBJECT, THE CLAPPER, THROUGH A DISTANCE.

LL. MAKE COIL OF 100 TURNS OF WIRE. USE CLAPPER, BELL, KNIFE, SWITCH, WOOD, 2 1.5-

NNECT DRY CELLS AND WIRE TO ELECTRIC BELL SO IT RINGS.

OF ELECTRIC BELL. RING IT WHEN KNIFE SWITCH CLOSED.

C BELL.

RIC BELL WORKS BY OBSERVING MECHANISM AT REST AND WHILE IT IS RINGING? DISCUSS FLO

ERGY CAN BE CONVERTED TO SOUND ENERGY BY A MECHANICAL DEVICE.

TELEGRAPH. MAKE COIL AND KEY. USE WOOD ADD TWO 1.5 VOLT DRY CELLS.

OF TELEGRAPH. SOUNDER MAKES CLICKS AS KEY DEPRESSED.

TELEPHONE TRANSMITTER. USE SUGAR BOX, ALUMINUM STRIPS, PAPER CLIPS, WIRE, PENICIL LEADS, 5 VOLT DRY CELLS.

OF TELEPHONE TRANSMITTER. SPEAK INTO BOX. VIBRATIONS CARRY CURRENT-WITH PATTERN-LIKE

ONE RECEIVER CHANGES ELECTRICITY TO SOUND. EXPOSE INSIDE OF RECIEVER, TOUCH WIRES TO DR  
TES AND MAKES SOUND WAVES.

MOTOR TRANSFERS AND MULTIPLIES A FORCE.

ELECTRIC MOTOR. MAKE ARMATURE AND COILS OF WIRE. USE KNIFE, SWITCH, PEGBOARD, AND TWO 1.

0206120038 DEMONSTRATE OPERATION OF ELECTRIC MOTOR. ARMATURE SPINS WHEN KNIFE

0206120039 KNOW THAT OPENING AND CLOSING A SWITCH IN AN ELECTRIC CIRCUIT CAN

0206120040 KNOW THAT SOUND WAVES MAY BE CONVERTED INTO VARYING STRENGTHS OF  
CONDUCTOR, AND RECONVERTED INTO SOUND WAVES.

0206120041 KNOW THAT SOUND WAVES CAN BE CONVERTED INTO ELECTRICAL ENERGY, TRAVELING  
SOUND WAVES.

0206120042 KNOW THAT ELECTRIC ENERGY CAN BE CHANGED TO ELECTROMAGNETIC  
SPACE AT THE SPEED OF LIGHT.

0206120043 KNOW THAT WHENEVER ELECTRONS FLOW THROUGH A WIRE, THEY SET UP A MAGNETIC

0206120044 KNOW THAT ELECTRONS MOVING BACK AND FORTH GENERATE ELECTROMAGNETIC

0206120045 KNOW THAT ELECTROMAGNETIC WAVES CAN BE CHANGED TO ELECTRIC ENERGY

0206120046 KNOW THAT LIGHT ENERGY LIKE SOUND ENERGY, CAN BE CONVERTED TO

0206120047 KNOW THAT ELECTROMAGNETIC WAVES CAN BE SEPARATED BY THEIR FREQUENCIES

0206120048 KNOW THAT ELECTROMAGNETIC WAVES CAN ACTIVATE DEVICES IN SPACE TO GIVE  
SIGNALS TO EARTH.

0206125 ENERGY TRANSFORMATION

0206125001 KNOW THAT WHEN ENERGY CHANGES FROM ONE FORM TO ANOTHER, THE TOTAL AMOUNT

0206125002 KNOW THAT IN ALL MASS-ENERGY RELATIONSHIPS, THE SUM OF THE AMOUNTS  
UNCHANGED.

C MOTOR. ARMATURE SPINS WHEN KNIFE SWITCH CLOSED.

SWITCH IN AN ELECTRIC CIRCUIT CAN BE USED TO TRANSMIT SIGNALS.

VERTED INTO VARYING STRENGTHS OF ELECTRIC CURRENT, TRANSFERRED THROUGH A  
SOUND WAVES.

VERTED INTO ELECTRICAL ENERGY, TRANSMITTED OVER A CIRCUIT, AND RECONVERTED TO

CHANGED TO ELECTROMAGNETIC WAVES THAT CAN CARRY SIGNALS THROUGH

W THROUGH A WIRE, THEY SET UP A MAGNETIC FIELD AROUND THE WIRE.

AND FORTH GENERATE ELECTROMAGNETIC WAVES.

CAN BE CHANGED TO ELECTRIC ENERGY THAT CAN BE CONVERTED INTO SOUND WAVES.

D ENERGY, CAN BE CONVERTED TO ELECTROMAGNETIC WAVES.

CAN BE SEPARATED BY THEIR FREQUENCIES.

CAN ACTIVATE DEVICES IN SPACE TO GATHER LIGHT AND SOUND AND TRANSMIT THEIR

OM ONE FORM TO ANOTHER, THE TOTAL AMOUNT OF ENERGY REMAINS UNCHANGED.

ATERIC PS, THE SUM OF THE AMOUNTS OF MATTER AND ENERGY INVOLVED REMAINS

0206125003 GIVEN DESCRIPTION OF AN ENERGY CHANGE, EXPLAIN IF IT HAS BEEN A TRANSFORMATION OF ENERGY AND/OR NAME THE FORM OR STATE TO WHICH IT HAS BEEN CHANGED.

0206125004 RECOGNIZE SITUATIONS IN WHICH WORK, AS A SCIENTIST, IS DONE. DEFINES IT.

0206130 ENERGY TRANSFORMATION (AIR)

0206130001 DEMONSTRATE FASTER MOVING AIR HAS LOWER PRESSURE BY BLOWING BE  
AN INVERTED FUNNEL CONTAINING A PING PONG CAUSING THE BALL TO BE

0206130002 KNOW THAT AIR MOVING FASTER OVER THE UPPER SURFACE OF AN OBJECT DEVIATES.

0206130003 DEMONSTRATE: KINETIC ENERGY INCREASES AND TEMPERATURE RISES AS M  
TIRE. PUMP GETS HOT NEAR BOTTOM, USE FIRE SYRINGE TO COMPRESS A

0206135 ENERGY TRANSFORMATION (ATOMS)

0206135001 EXPLAIN DIFFERENCE BETWEEN ATOMS AND MOLECULES WHEN GIVEN A DI

0206135002 MAKE MODELS OF NEUTRAL ATOMS OF DIFFERENT ELEMENTS.

0206135003 NAME KINDS OF PARTICLES IN ATOM.

0206135004 RECOGNIZE RELATIONSHIP BETWEEN THE ATOMIC NUMBER OF AN ELEMENT AND  
ELEMENT.

0206135005 DESCRIBE ATOMS. MADE UP OF 3 KINDS OF PARTICLES, OBSERVE 4  
PARTICLES, DIFFERENT NUMBERS.

0206135006 KNOW THAT ELECTRONS ARE EXTREMELY SMALL.

0206135007 KNOW THAT LOSS OR GAIN OF AN ELECTRON GIVES AN ATOM A CHARGE.

CHANGE, EXPLAIN IF IT HAS BEEN A TRANSFORMATION IN THE FORM OR THE STATE OF THE  
STATE TO WHICH IT HAS BEEN CHANGED.

WORK, AS A SCIENTIST DEFINES IT, IS DONE.

IS LOWER PRESSURE BY BLOWING BETWEEN TWO SUSPENDED APPLES AND BLOWING THROUGH  
PING PONG CAUSING THE BALL TO BE SUSPENDED INSIDE THE FUNNEL.

THE UPPER SURFACE OF AN OBJECT DEVELOPS A LIFTING FORCE.

CREASES AND TEMPERATURE RISES AS MOLECULES OF GAS PRESS CLOSER. PUMP AIR INTO  
USE FIRE SYRINGE TO COMPRESS AIR. AIR GETS HOT, IGNITES COTTON INSIDE.

AND MOLECULES WHEN GIVEN A DIAGRAM, DRAWING, OR DESCRIPTION OF EACH.

DIFFERENT ELEMENTS.

THE ATOMIC NUMBER OF AN ELEMENT AND THE NUMBER OF ELECTRONS IN THE ATOM OF THE

KINDS OF PARTICLES, OBSERVE 4 DIFFERENT MODELS OF ATOMS WITH SAME KINDS OF

SMALL.

STATION GIVES AN ATOM A CHARGE.

0206135008 KNOW THAT THE BASIC ATOMIC PARTICLES ARE PROTONS WITH A POSITIVE CHARGE  
NEUTRONS WITH NO CHARGE.

0206135009 KNOW THAT EACH DIFFERENT ATOM CONSISTS OF PARTICLES ARRANGED IN IT

0206135010 KNOW THAT THE NUMBER OF PARTICLES IN AN ATOM DETERMINES ITS STRUCTURE

0206135011 REINFORCE CONCEPT OF ATOMIC STRUCTURE BY MODELING SEVERAL ATOMS

0206135012 KNOW THAT WHEN THE NUCLEUS OF THE ATOM CHANGES, ENERGY IS RELEASED.

0206135013 KNOW THAT THE PARTS OF THE ATOM ARE TIGHTLY BOUND TOGETHER; CE

0206135014 KNOW THAT RADIOACTIVE (UNSTABLE) ATOMS EMIT PARTICLES FROM THEIR NU

0206135015 KNOW THAT A CHANGE IN THE NUMBER OF PROTONS IN AN ATOM CHANGES THE AT

0206135016 KNOW THAT ENERGY MUST BE PUT IN TO INCREASE SPEED OF NUCLEAR PARTIC

0206135017 KNOW THAT ENERGY INPUT IS NEEDED TO RAISE THE ATOMIC NUMBER.

0206140 ENERGY TRANSFORMATION (BURNING CANDLE)

0206140001 DEMONSTRATE WHEN A FUEL BURNS WATER IS FORMED, BY PLACING A BUR  
GOES OUT AND WATER FORMS INSIDE JAR.

0206145 ENERGY TRANSFORMATION (CARBON DIOXIDE)

0206145001 DEMONSTRATE THAT CARBON DIOXIDE IS FORMED DURING THE SAME ACTIVITY  
WITH LIMEWATER, CAUSING THE LIMEWATER TO TURN MILKY.

PARTICLES ARE PROTONS WITH A POSITIVE CHARGE, ELECTRONS WITH A NEGATIVE CHARGE, AND  
 IT CONSISTS OF PARTICLES ARRANGED IN ITS OWN CHARACTERISTIC STRUCTURE.

THE NUMBER OF PARTICLES IN AN ATOM DETERMINES ITS STRUCTURE AND ITS ATOMIC WEIGHT.

BY MODELING SEVERAL ATOMS.

IF THE ATOM CHANGES, ENERGY IS RELEASED.

PARTICLES ARE TIGHTLY BOUND TOGETHER; CERTAIN PARTS ARE ELECTRICALLY CHARGED.

SOME ATOMS EMIT PARTICLES FROM THEIR NUCLEUS; THESE PARTICLES HAVE ENERGY.

THE NUMBER OF PROTONS IN AN ATOM CHANGES THE ATOM INTO THAT OF ANOTHER ELEMENT.

IN ORDER TO INCREASE SPEED OF NUCLEAR PARTICLES.

IN ORDER TO RAISE THE ATOMIC NUMBER.

OF A CANDLE)

WATER IS FORMED, BY PLACING A BURNING CANDLE IN A CLOSED JAR UNTIL THE FLAME  
 GOES OUT.

DIOXIDE)

WATER IS FORMED DURING THE SAME ACTIVITY, BY MISSING THE GAS TRAPPED IN THE JAR  
 IN ORDER TO TURN MILKY.

0206160 ENERGY TRANSFORMATION (COMPOUNDS)

0206160001 KNOW THAT ENERGY IS NEEDED TO SEPARATE METALS FROM THEIR COMPOUNDS.

0206165 ENERGY TRANSFORMATION (COMPOUNDS AND MIXTURES)

0206165001 FROM A GIVEN DEFINITION OR DESCRIPTION OF A SUBSTANCE, RECOGNIZE SU

0206175 ENERGY TRANSFORMATION (COPPER OXIDE)

0206175001 THE CHILD WILL DEMONSTRATE THAT COPPER CAN BE OBTAINED FROM COPPER  
TONGS IN A BUNSEN BURNER, CAUSING SOME COPPER TO FORM ON THE TONGS.

0206185 ENERGY TRANSFORMATION (ELECTRIC)

0206185001 DEMONSTRATE SEPARATION OF COMPOUND WITH ELECTRIC CURRENT USING TWO 1-  
STEEL SPOONS TO WIRE, PUT IN COPPER SULFATE SOLUTION.

0206190 ENERGY TRANSFORMATION (ELEMENTS)

0206190001 CLASSIFY COMMON SUBSTANCES AS ELEMENTS OR COMPOUNDS WHEN GIVEN S

0206190002 APPLY INFORMATION OBTAINED FROM SIMPLE EXPERIMENTAL TESTS TO IDE

0206205 ENERGY TRANSFORMATION (FORMS)

0206205001 EXPLAIN WHAT FORM OF ENERGY (CHEMICAL, MECHANICAL, HEAT, LIGHT, SOUND  
(KINETIC OR POTENTIAL) DIFFERENT OBJECTS HAVE, USE, OR PRODUCE THAT

0206205002 FROM LIST OF COMMON OBJECTS, RECOGNIZE THOSE WHICH ARE IN A STATE OF  
WHICH ARE IN A STATE OF KINETIC ENERGY (ENERGY OF MOTION).

POUNDS)

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TO SEPARATE METALS FROM THEIR COMPOUNDS.

POUNDS AND MIXTURES)

DESCRIPTION OF A SUBSTANCE, RECOGNIZE SUBSTANCE AS EITHER A COMPOUND OR A MIXTURE.

PER OXIDE)

THAT COPPER CAN BE OBTAINED FROM COPPER OXIDE, BY HEATING COPPER OXIDE POWDER ON TONGS CAUSING SOME COPPER TO FORM ON THE TONGS.

TRIC)

COMPOUND WITH ELECTRIC CURRENT USING TWO 1-1/2 VOLT DRY CELLS, ATTACH TWO STAINLESS STEEL TONGS IN COPPER-SULFATE SOLUTION.

ENTS)

AS ELEMENTS OR COMPOUNDS WHEN GIVEN SYMBOLS, FORMULAS, OR MODELS.

FROM SIMPLE EXPERIMENTAL TESTS TO IDENTIFY ELEMENTS.

OS)

(CHEMICAL, MECHANICAL, HEAT, LIGHT, SOUND, ELECTRICAL) AND/OR WHAT STATE OF ENERGY DIFFERENT OBJECTS HAVE, USE, OR PRODUCE THAT MAKE IT POSSIBLE FOR THEM TO DO WORK.

RECOGNIZE THOSE WHICH ARE IN A STATE OF POTENTIAL ENERGY (STORED ENERGY) AND THOSE WHICH ARE IN A STATE OF KINETIC ENERGY (ENERGY OF MOTION).

0206210 ENERGY TRANSFORMATION (HEAT)

0206210001 KNOW THAT THE NATURE OF HEAT HAS ENABLED MAN TO DEVELOP WAYS TO

0206210002 KNOW THAT HEAT IS THE KINETIC ENERGY OF MOLECULES.

0206210003 KNOW THAT HEAT IS TRANSFERRED FROM ONE PLACE TO ANOTHER BY MOVING

0206210004 KNOW THAT HEAT ENERGY IS TRANSFERRED FROM MOLECULE TO MOLECULE

0206210005 THE CHILD WILL DESCRIBE THAT THE VACUUM FLASK ACTS AS AN INSULATOR FOR HEAT.

0206210006 KNOW THAT A SUBSTANCE BECOMES COOLER AS A RESULT OF TRANSFER

0206210007 KNOW THAT HEAT GIVES GREATER KINETIC ENERGY TO MOLECULES

0206210008 TELL DIFFERENCE BETWEEN HEAT AND TEMPERATURE, DISCUSS HEAT IN  
AND TEMPERATURE AS MEANS OF MEASURING HOT AND COLD.

0206215 ENERGY TRANSFORMATION (INTERNAL COMBUSTION)

0206215001 GIVEN DRAWINGS SHOWING MOVEMENT OF AIR OR WATER MOLECULES  
PRODUCTION OF KINETIC ENERGY.

0206215002 GIVEN DESCRIPTION OF MACHINE ACTIVITIES THAT SHOW DIFFERENT  
ELECTRICAL), MATCH EACH MACHINE ACTIVITY WITH FORM OF ENERGY I

0206215003 GIVEN DESCRIPTION OF AN INTERNAL COMBUSTION ENGINE, RECOGNIZING  
MECHANICAL ENERGY IS BEING USED OR PRODUCED.

0206220 ENERGY TRANSFORMATION (KINETIC)

0206220001 KNOW THAT MOLECULES MAY BE GIVEN KINETIC ENERGY IN A CHEMICAL

HAS ENABLED MAN TO DEVELOP WAYS TO MODIFY AND CONTROL HIS ENVIRONMENT.

IC ENERGY OF MOLECULES,

D FROM ONE PLACE TO ANOTHER BY MOVING MOLECULES,

NSFERRED FROM MOLECULE TO MOLECULE; IT CANNOT BE TRANSFERRED IN A VACUUM,

THE VACUUM FLASK ACTS AS AN INSULATOR, WHICH SLOW DOWN OR PREVENTS THE TRAVEL OF

S COOLER AS A RESULT OF TRANSFER OF ITS HEAT ENERGY,

KINETIC ENERGY TO MOLECULES.

AND TEMPERATURE; DISCUSS HEAT IN TERMS OF NUMBER AND SPEED OF MOLECULES IN MOTION  
MEASURING HOT AND COLD,

NAL COMBUSTION)

ENT OF AIR OR WATER

MOLECULES, RECOGNIZE WHICH ILLUSTRATES THE GREATEST

ACTIVITIES THAT SHOW  
INE ACTIVITY WITH FORM OF

DIFFERENT FORMS OF ENERGY (CHEMICAL, MECHANICAL, OR  
ENERGY IT USES OR PRODUCES,

RNAL COMBUSTION ENGINE,  
SFD OR PRODUCED.

RECOGNIZE WHERE POTENTIAL, KINETIC, CHEMICAL, AND

IC)

IVEN KINETIC ENERGY IN A

CHEMICAL CHANGE.

0206220002	KNOW THAT AN INCREASE IN KINETIC ENERGY CAN PRODUCE AN	UNBALANCE
0206220003	KNOW THAT ACTION AND REACTION, RESULTING FROM KINETIC FORCE.	ENERGY GI
0206220004	KNOW THAT ROCKETS AND JETS OPERATE ON THE SAME INTO FORCE.	PRINCIPLE
0206220005	KNOW THAT A TRANSFER OF ELECTRONS FROM ONE OBJECT TO ELECTRONS MOVE, THEY HAVE KINETIC ENERGY.	ANOTHER G
0206220006	DESCRIBE RESULTS OF KINETIC ENERGY ACTIVITY. DUE TO AS GAS IS COMPRESSED.	MOLECULES
0206225	ENERGY TRANSFORMATION (LIGHT AND SOUND)	
0206225001	KNOW THAT THE DIRECTION OF A MOVING OBJECT CAN BE	DETERMINE
0206230	ENERGY TRANSFORMATION (LIQUID)	
0206230001	DEMONSTRATE MOTION OF INK PARTICLES: ADD FEW DROPS OF WATER.	INK IN GLA
0206230002	THE CHILD WILL DESCRIBE EXAMPLES OF BERNOULLI'S PRESSURE WITHIN THE FLUID.	DISCOVERY
0206235	ENERGY TRANSFORMATION (MASS)	
0206235001	TELL THE DIFFERENCE BETWEEN OPERATIONAL DEFINITIONS OF	WEIGHT AND
0206235002	DESCRIBE HOW MASS, VOLUME, AND DENSITY ARE RELATED WHEN	GIVEN INFO

IN KINETIC ENERGY CAN PRODUCE AN

UNBALANCED FORCE.

REACTION, RESULTING FROM KINETIC

ENERGY GIVEN TO MOLECULES CAN PRODUCE AN UNBALANCED

JETS OPERATE ON THE SAME

PRINCIPLE, BUT ROCKETS CONVERTS KINETIC ENERGY DIRECTLY

OF ELECTRONS FROM ONE OBJECT TO  
HAVE KINETIC ENERGY.

ANOTHER GIVES THEM POTENTIAL ENERGY; WHEN THE

KINETIC ENERGY ACTIVITY. DUE TO

MOLECULES BOUNCING OFF ONE ANOTHER WITH GREATER ENERGY

(LIGHT AND SOUND)

OF A MOVING OBJECT CAN BE

DETERMINED BY WAVELENGTHS OF LIGHT OR SOUND.

(LIQUID)

INK PARTICLES: ADD FEW DROPS OF

INK IN GLASS OF WATER. INK WILL SPREAD THROUGHOUT

EXAMPLES OF BERNOULLI'S  
FLUID.

DISCOVERY THAT THE FASTER A FLUID MOVES THE LOWER THE

(MASS)

BETWEEN OPERATIONAL DEFINITIONS OF

WEIGHT AND OF MASS.

MASS AND DENSITY ARE RELATED WHEN

GIVEN INFORMATION ON MASS AND VOLUME OF VARIOUS OBJECTS.

0206245

ENERGY TRANSFORMATION (MOLECULAR)

0206245001

KNOW THAT WHEN A SUBSTANCE BECOMES WARMER, THE MOTION OF ITS MOLECULES INCREASES.

0206245002

KNOW THAT THE ENERGY OF MOVING MOLECULES OF AIR AND WATER PROVIDES FOR THE MOTION OF THE MOLECULES.

0206245003

KNOW THAT A CHANGE OF STATE INCREASES OR DECREASES THE KINETIC ENERGY OF THE MOLECULES.

0206245004

DESCRIBE HOW KINETIC ENERGY IS USED WHEN BOILING WATER BLOWS THE CORK OUT OF A TEST TUBE.

0206245005

DEMONSTRATE MOVING MOLECULES DO WORK. PLACE WATER IN A TEST TUBE, CAUSING CORK TO BE BLOWN OUT.

0206245006

DESCRIBE HYDROGEN GAS. COLLECT FROM WATER WITH HOFFMAN APPARATUS. LIGHTED MATCH BROUGHT TO MOUTH OF TUBE.

0206250

ENERGY TRANSFORMATION (NUCLEAR)

0206250001

KNOW THAT IN NUCLEAR REACTIONS, A LOSS OF MATTER IS A GAIN IN ENERGY. THE TOTAL ENERGY REMAINS UNCHANGED.

0206250002

KNOW THAT ENERGY CAN BE RELEASED BY FISSION OF ATOMIC NUCLEI; THE ENERGY RELEASED IS GREAT.

0206250003

KNOW THAT A CHAIN REACTION DEPENDS ON THE QUANTITY OF URANIUM WHICH IS PRESENT.

0206250004

KNOW THAT NEUTRONS, WHEN TRAVELING AT THE RIGHT SPEED, CAUSE FISSION OF NUCLEI. CONTROLS THE RATE OF FISSION.

0206250005

KNOW THAT NUCLEAR ENERGY CAN BE HARNESSSED TO MACHINES TO DEVELOP OTHER FORMS OF ENERGY.

0206250006

KNOW THAT NUCLEAR ENERGY PRODUCES GREAT FORCES.

0206250007

KNOW THAT NUCLEAR ENERGY HAS PRODUCED USEFUL ISOTOPES.

AR)  
BECOMES WARMER, THE MOTION OF ITS MOLECULES INCREASES.

MOLECULES OF AIR AND WATER PROVIDE A FORCE THAT CAN BE HARNESSSED TO DO WORK.

CREASES OR DECREASES THE KINETIC ENERGY OF MOLECULES OF MATTER.

USED WHEN BOILING WATER BLOWS THE CORK FROM THE TEST TUBE.

DO WORK. PLACE WATER IN TEST TUBE, FIT GREASED CORK IN PLACE AND HEAT TO BOIL,

T FROM WATER WITH HOFFMAN APPARATUS. OBSERVE THAT GLASS EXPLODES WITH A POP WHEN  
OF TUBE

A LOSS OF MATTER IS A GAIN IN ENERGY; AND THE SUM OF THE MATTER AND ENERGY

ED BY FISSION OF ATOMIC NUCLEI; THE RATE OF FISSION CAN BE CONTROLLED.

ENDS ON THE QUANTITY OF URANIUM WHICH CAN UNDERGO FISSION.

LING AT THE RIGHT SPEED, CAUSE FISSION. THE NUMBER OF NEUTRONS CAPTURED BY  
SSION.

E HARNESSSED TO MACHINES TO DEVELOP OTHER FORMS OF ENERGY TO DO WORK.

CEES GREAT FORCES.

PRODUCED USEFUL ISOTOPES.

0206250008 KNOW THAT IN A NUCLEAR REACTION, MATTER LOST EQUALS ENERGY GAINED

0206250009 KNOW THAT IN NUCLEAR REACTIONS, THE NUCLEI OF ATOMS ARE DIVIDED (FISSION)

0206250010 DEMONSTRATE USE OF GEIGER COUNTER. RECORD COUNTS ON GAUGE FROM

0206250011 MAKE MODEL OF NUCLEAR REACTOR.

0206250012 KNOW THAT IN A FUSION REACTION, SOME MATTER IS CONVERTED TO TREMENDOUS

0206250013 KNOW THAT GREAT ENERGY STARTS A FUSION REACTION; GREAT ENERGY IS

0206250014 GIVEN DESCRIPTION OF AN ATOM BEFORE AND AFTER NUCLEAR PROCESS HAS  
NATURAL RADIOACTIVE DECAY, ARTIFICIAL RADIOACTIVE DECAY (FISSION)

0206250015 IDENTIFY BENEFICIAL (E.G., TREATMENT OF CANCER) AND THE DETRIMENTAL  
NUCLEAR ENERGY.

0206265 ENERGY TRANSFORMATION (PRESSURE)

0206265001 KNOW THAT DIFFERENCES IN PRESSURE RESULT IN A FORCE ACTING IN

0206265002 KNOW THAT A DIFFERENCE IN PRESSURE MAY RESULT IN MOTION.

0206265003 KNOW THAT AN INCREASE IN PRESSURE RAISES TEMPERATURE, AND A RISE

0206275 ENERGY TRANSFORMATION (SUBSTANCE)

0206275001 THE CHILD WILL DESCRIBE THE PRESENCE OF SUGAR IN THE TEST TUBE  
DIASTASE CHANGING STARCH TO SUGAR.

REACTION, MATTER LOST EQUALS ENERGY GAINED.

ACTIONS, THE NUCLEI OF ATOMS ARE DIVIDED (FISSION) OR COMBINED (FUSION).

ER COUNTER. RECORD COUNTS ON GUAGE FROM SOURCE, SUCH AS LUMINOUS CLOCK DIAL.

EACTION.

ACTION: SOME MATTER IS CONVERTED TO TREMENDOUS ENERGY.

TARTS A FUSION REACTION; GREAT ENERGY IS RELEASED.

ATOM BEFORE AND AFTER NUCLEAR PROCESS HAS OCCURRED, EXPLAIN WHETHER ATOM WENT THROUGH  
Y, ARTIFICIAL RADIOACTIVE DECAY (FISSION), OR FUSION.

., TREATMENT OF CANCER) AND THE DETRIMENTAL (E.G., RADIOACTIVE FALLOUT) ASPECTS OF

RESSURE)  
PRESSURE RESULT IN A FORCE ACTING IN THE DIRECTION OF THE LOWER PRESSURE.

N PRESSURE MAY RESULT IN MOTION.

PRESSURE RAISES TEMPERATURE, AND A RISE IN TEMPERATURE INCREASES PRESSURE.

BSTANCE)

HE PRESENCE OF SUGAR IN THE TEST TUBE WHICH TURNED YELLOW-ORANGE, DUE TO THE

0206280 ENERGY TRANSFORMATION (VOLUME)

0206280001 USE FORMULA (L X W X H) FOR FINDING VOLUME OF A REGULAR SOLID (SUCH AS A CUBE). UNIT OF VOLUME (CUBIC CENTIMETER).

0206285 ENERGY TRANSFORMATION (WATER)

0206285001 DEMONSTRATE THAT COLD WATER CAN GIVE MORE HEAT TO ICE THAN HOT WATER. BOILING WATER TO ONE, COLD TO OTHER. COLD WATER MELTS ICE FASTER.

0206285002 MAKE TABLE OF TEMPERATURES OF WATER AND TIME TO MELT ICE.

0206285003 DEMONSTRATE MOTION OF WATER MOLECULES. COLUMN OF WATER WILL MOVE IN FLASK WHEN FLASK IS WARMED BY HANDS.

0206285004 THE CHILD WILL DEMONSTRATE THAT A COLUMN OF WATER DOES NOT MOVE UP THE GLASS FLASK.

0206285005 THE CHILD WILL DESCRIBE THAT THE WATER MOVES UP THE GLASS TUBE WHEN THE WATER IS WARMED.

0206295 FISH

0206295001 THE CHILD WILL CONSTRUCT A HYPOTHESIS ABOUT HOW LONG IT WILL TAKE A FISH TO RESPOND TO A STIMULUS.

0206300 FORCE AND MOTION

0206300001 GIVEN A SERIES OF EVERYDAY ACTIVITIES, RECOGNIZE THOSE WHICH ARE COMPLETING AN ACTION OR ACTIVITY.

0206300002 KNOW THAT WHEN EFFORT FORCE IS MULTIPLIED, DISTANCE IS LOST.

0206300003 KNOW THAT FRICTION INCREASES EFFORT THAT MUST BE APPLIED, AND THAT FRICTION DECREASES SPEED.

FINDING VOLUME OF A REGULAR SOLID (SUCH AS RECTANGULAR PRISM) USING BASIC METRIC  
ETER).

CAN GIVE MORE HEAT TO ICE THAN HOT WATER. FILL TWO BEAKERS, WITH ICE, ADD 1/2 IN.  
O OTHER. COLD WATER MELTS ICE FASTER.  
F WATER AND TIME TO MELT ICE.

MOLECULES. COLUMN OF WATER WILL MOVE UP GLASS TUBE INSERTED AND SEALED INTO GLASS  
Y HANDS.

HAT A COLUMN OF WATER DOES NOT MOVE UPWARD WHEN A VACUUM FLASK IS USED INSTEAD OF  
THE WATER MOVES UP THE GLASS TUBE, DUE TO FASTER MOVING MOLECULES, WHEN THE

YPOTHESIS ABOUT HOW LONG IT WILL TAKE FOR THE FISH TO BE CONDITIONED TO THE NEW

CTIVITIES, RECOGNIZE THOSE WHICH ARE DEPENDENT UPON THE GRAVITATIONAL FORCE FOR  
VITY.

IS MULTIPLIED, DISTANCE IS LOST.

EFFORT THAT MUST BE APPLIED, AND DECREASES SPEED (DISTANCE).

- 0206300004 KNOW THAT FRICTION IS A FORCE THAT RESISTS MOTION.
- 0206300005 KNOW THAT THE AMOUNT OF FRICTION DEPENDS UPON THE KINDS OF SURFA
- 0206300006 KNOW THAT THE LESS TWO SURFACES ARE IN CONTACT, THE LESS THE FRIC
- 0206300007 KNOW THAT FRICTION IS SOMETIMES USEFUL.
- 0206300008 KNOW THAT WORK IS DONE ONLY WHEN AN OBJECT IS MOVED THROUGH
- 0206300009 STATE THE RULE FOR WORK WHICH IS MULTIPLYING THE FORCE NEEDED B
- 0206300010 INFER RELATIONSHIPS AND DEVELOP AN EQUATION FOR WORK.
- 0206300011 KNOW THAT EVERY ACTION HAS AN EQUAL AND OPPOSITE REACTION
- 0206300012 KNOW THAT ACTION-REACTION CAN BE USED TO CHANGE SPEED OR DIREC
- 0206300013 USING NEWTON'S FIRST LAW OF MOTION, PREDICT WHAT WILL HAPPEN TO  
APPLIED TO THE OBJECTS.
- 0206300014 PREDICT WHICH OF SEVERAL OBJECTS WILL ACCELERATE MORE WHEN GIV  
DIRECTION OF THE FORCE APPLIED.
- 0206300015 RECOGNIZE FACTORS THAT WILL AFFECT THE INERTIA OF AN OBJECT IN
- 0206300016 PREDICT HOW THE FOLLOWING FACTORS AFFECT THE MOVEMENT OF OBJECT

FORCE THAT RESISTS MOTION.

FRICTION DEPENDS UPON THE KINDS OF SURFACES THAT ARE IN CONTACT.

SURFACES ARE IN CONTACT, THE LESS THE FRICTION BETWEEN THEM.

SOMETIMES, USEFUL.

ONLY WHEN AN OBJECT IS MOVED THROUGH A DISTANCE.

WHICH IS MULTIPLYING THE FORCE NEEDED BY THE DISTANCE THE OBJECT IS MOVED.

DEVELOP AN EQUATION FOR WORK.

IS AN EQUAL AND OPPOSITE REACTION.

CAN BE USED TO CHANGE SPEED OR DIRECTION OF MOTION.

OF MOTION, PREDICT WHAT WILL HAPPEN TO OBJECTS MOVING OR AT REST WHEN SOME FORCE IS

OBJECTS WILL ACCELERATE MORE WHEN GIVEN THE MASS OF THE OBJECTS AND THE SIZE AND

ALL AFFECT THE INERTIA OF AN OBJECT IN A GIVEN SITUATION.

FACTORS AFFECT THE MOVEMENT OF OBJECTS: FORCES, FRICTION, UNBALANCED FORCES.

0206310

GENETICS

0206310001

KNOW THAT THE CHARACTERISTICS OF A LIVING THING ARE LAID DOWN IN

0206310002

KNOW THAT INHERITED TRAITS INTERACT WITH THE ENVIRON

0206310003

KNOW THAT THE CELLS IN THE OFFSPRING OF ONLY ONE PARENT WILL CA  
(CELL NUCLEUS) DETERMINES FOR THE TRAITS OF THE PARENT.

0206310004

KNOW THAT A SEED PLANT IS THE PRODUCT OF A CELL CARRYING TRAITS

0206310005

KNOW THAT THE DNA MOLECULE CARRIES IN ITS PARTS (GENES) THE COD  
ORGANISM.

0206310006

KNOW THAT GENES CARRYING THE GENETIC CODE FOR A TRAIT MAY BE

0206310007

KNOW THAT THE GENETIC CODE IS CARRIED BY A LARGE MOLECUL

0206310008

KNOW THAT ORGANISMS CAN BE MAINTAINED GENETICALLY PURE FOR A G

0206310009

KNOW THAT A PURE TRAIT CAN BE KEPT PURE BY MAKING SURE THAT SE

0206310010

KNOW THAT SELECTING OF TRAITS CAN BE CONTROLLED BY SELECTI

0206310011

KNOW THAT DOMINANT AND RECESSIVE TRAITS CAN BE SORTED OUT BY

0206310012

KNOW THAT GENETIC TRAITS INTERACT IN MANY WAYS. THE RESULTZ  
BLENDING.

0206310013

KNOW THAT WHEN TWO DIFFERENT GENES AFFECTING THE SAME TRAIT A  
ORGANISM IS A HYBRID.

0206310014

KNOW THAT THE VISIBLE APPEARANCE OF TRAITS MAY BE ALTERED

CHARACTERISTICS OF A LIVING THING ARE LAID DOWN IN A GENETIC CODE.

ORGANISMS INTERACT WITH THE ENVIRONMENT.

OFFSPRING OF ONLY ONE PARENT WILL CARRY ONLY ITS CHROMOSOMES (TINY BODIES WITHIN THE CELL) AND THE TRAITS OF THE PARENT.

THE PRODUCT OF A CELL CARRYING TRAITS FROM TWO PARENTS,

THE CELL CARRIES IN ITS PARTS (GENES) THE CODE THAT DETERMINES THE INHERITED TRAITS OF AN ORGANISM.

THE GENETIC CODE FOR A TRAIT MAY BE EITHER DOMINANT OR RECESSIVE.

THE TRAIT IS CARRIED BY A LARGE MOLECULE IN THE CHROMOSOME.

PLANTS MAINTAINED GENETICALLY PURE FOR A GIVEN TRAIT,

CAN BE KEPT PURE BY MAKING SURE THAT SEEDS HAVE GENES FOR ONLY THE PURE TRAIT.

THEIR TRAITS CAN BE CONTROLLED BY SELECTIVE POLLINATION.

DOMINANT AND RECESSIVE TRAITS CAN BE SORTED OUT BY CROSSING.

GENES INTERACT IN MANY WAYS. THE RESULTING EFFECT MAY BE DOMINANCE, RECESSIVENESS, OR

CO-DOMINANCE. IF SEVERAL GENES AFFECTING THE SAME TRAIT ARE IN THE CHROMOSOME (FOR THE DNA MOLECULE), THE

APPEARANCE OF TRAITS MAY BE ALTERED, BUT THE TRAITS REMAIN UNCHANGED.

0206310015 KNOW THAT THE GENETIC CODE CAN CHANGE.

0206310016 KNOW THAT CHANGES IN THE GENETIC CODE PRODUCE CHANGES IN LIVING THINGS.

0206310017 KNOW THAT OFFSPRING OF A SINGLE PARENT HAVE THE PARENT'S GENETIC CODE.

0206310018 KNOW THAT A MUTATION (A CHANGE IN THE GENE) IS PASSED ALONG IN THE GENETIC CODE.

0206310019 KNOW THAT IMPROVED PLANTS AND ANIMALS ARE THE PRODUCT OF SELECTIVE BREEDING.

0206310020 KNOW THAT OFFSPRING OF TWO PARENTS INHERIT GENES FROM BOTH PARENTS. THE GENETIC CODE OF THE OFFSPRING DEPENDS ON THE INTERACTION OF THE GENETIC CODE FROM BOTH PARENTS.

0206310021 KNOW THAT DESIRABLE MUTATIONS MAY BE ESTABLISHED BY CROSS-POLLINATION.

0206310022 KNOW THAT DESIRABLE MUTATIONS IN ANIMALS MAY BE ESTABLISHED BY BREEDING.

0206315

# GEOLOGY

0206315001

KNOW THAT SUBSTANCES (MINERALS) IN THE EARTH'S CRUST CAN BE ALTERED BY HEAT AND PRESSURE.

0206320

# HUMAN BODY (BEHAVIOR)

0206320001

KNOW THAT PAST EXPERIENCES PROVIDE INSIGHT INTO METHODS OF SOLVING PROBLEMS.

0206320002

THE CHILD WILL DEMONSTRATE HOW INSIGHT DEVELOPS- AS HE TRIES TO FIND OUT HOW MUCH WATER WILL BE DISPLACED.

0206320003

KNOW THAT HABITS ARE LEARNED ACTS THAT HAVE BECOME AUTOMATIC.

TE CAN CHANGE.

GENETIC CODE PRODUCE CHANGES IN LIVING THINGS.

SINGLE PARENT HAVE THE PARENT'S GENETIC CODE.

CHANGE IN THE GENE) IS PASSED ALONG IN THE GENETIC CODE.

AND ANIMALS ARE THE PRODUCT OF SELECTIVE BREEDING FOR THE DESIRED TRAITS.

NO PARENTS INHERIT GENES FROM BOTH PARENTS. AN INCREASE IN THE NUMBER OF MUTANTS  
IN OF THE GENETIC CODE FROM BOTH PARENTS.

IONS MAY BE ESTABLISHED BY CROSS-POLLINATION OF PLANTS HAVING THE DESIRED TRAITS.

IONS IN ANIMALS MAY BE ESTABLISHED BY SELECTIVE BREEDING.

MINERALS) IN THE EARTH'S CRUST CAN BE ALTERED TO PRODUCE NEW MATERIALS,

THEY PROVIDE INSIGHT INTO METHODS OF SOLVING A PROBLEM AND ACHIEVING A GOAL.

HOW INSIGHT DEVELOPS- AS HE TRIES TO SOLVE A PROBLEM, USING A JAK- FOR DETERMINING HOW  
CEDED.

THESE ACTS THAT HAVE BECOME AUTOMATIC.

0206320004	THE CHILD WILL CONSTRUCT A HYPOTHESIS, INDICATING DECREASE SMOOTHLY WITH PRACTICE.	WHETHER OR
0206320005	DEMONSTRATE IMPORTANCE OF REGULAR PRACTICE; COMPARE ANOTHER WHO HAS PRACTICED.	RESULTS OF
0206320006	THE CHILD WILL DEMONSTRATE THAT LEARNING CAN LEAD TO AN COMPLETE THE ACT TO DECREASE WITH PRACTICE.	AUTOMATIC
0206320007	KNOW THAT DEVELOPMENT OF A HABIT REQUIRES PRACTICE,	
0206320008	THE CHILD WILL DESCRIBE THAT REGULAR PRACTICE HELPS IN	FORMING A
0206320009	KNOW THAT LEARNING IS IMPROVED BY THE DEVELOPMENT OF	EFFICIENT
0206320010	KNOW THAT GOOD STUDY HABITS REQUIRE THE PROPER TOOLS,	EQUIPMENT,
0206320011	KNOW THAT DEVELOPMENT OF A HABIT REQUIRES THE PROPER	CONDITIONS
0206320012	INFER THAT DEVELOPMENT OF GOOD STUDY HABITS RESULTS IN	MORE EFFIC
0206320013	THE CHILD WILL DESCRIBE THAT HE CANNOT PREVENT THIS	REFLEX JY
0206335	HUMAN BODY (DIET)	
0206335001	MATCH ESSENTIAL NUTRIENT WITH THE FOOD WHICH CAN PROVIDE MAJOR AMOUN	
0206335002	KNOW THAT HARMFUL BACTERIA IN MILK ARE DESTROYED BY	PASTEURIZAT

HYPOTHESIS, INDICATING  
PRACTICE.

WHETHER OR NOT THE TIME TO COMPLETE THE ACT WILL

REGULAR PRACTICE: COMPARE

RESULTS OF WRITING NAME WITH OPPOSITE HAND AGAINST

THAT LEARNING CAN LEAD TO AN  
E WITH PRACTICE.

AUTOMATIC ACT (TYING OF A BOW KNOT), CAUSING THE TIME TO

HABIT REQUIRES PRACTICE.

REGULAR PRACTICE HELPS IN

FORMING A NEW HABIT.

VED BY THE DEVELOPMENT OF

EFFICIENT HABITS OF STUDY.

REQUIRE THE PROPER TOOLS,

EQUIPMENT, AND SURROUNDINGS.

HABIT REQUIRES THE PROPER

CONDITIONS AND SURROUNDINGS.

GOOD STUDY HABITS RESULTS IN

MORE EFFICIENT LEARNING.

HE CANNOT PREVENT THIS

REFLEX BY THINKING ABOUT IT.

TH THE FOOD WHICH CAN PROVIDE MAJOR AMOUNT OF THAT NUTRIENT.

IN MILK ARE DESTROYED BY

PASTEURIZATION.

0206340

HUMAN BODY (DIGESTIVE)

0206340001

DEMONSTRATE ACTION OF ENZYME: MIX STARCH IN TWO TUBES, ADD DIASTASE. ONE TURNS YELLOW-ORANGE.

0206340002

DEMONSTRATE ACTION OF BACTERIA IN STOMACH-USING FOOD- GELATIN. A ONE, WATER TO OTHER, DETERMINE GROWTH.

0206345

HUMAN BODY (DISEASE)

0206345001

KNOW THAT CERTAIN CELLS SECRETE SUBSTANCES THAT PROVIDE AN ENVIRONMENT

0206345002

INVESTIGATE THE FUNCTION OF EPITHELIAL CELLS THAT LINE THE BODY CAVITY

0206345003

KNOW THAT ANTIBIOTICS CHANGE THE ENVIRONMENT OF CERTAIN TYPES OF MICROORGANISMS SURVIVAL.

0206345004

KNOW THAT THE FAVORABLE ENVIRONMENT FOR A VIRUS IS WITHIN THE CELL

0206345005

KNOW THAT ONLY ANTIBODIES GIVE IMMUNITY.

0206345006

THE CHILD WILL DESCRIBE THAT HIS STOMACH CELLS MAKE A JUICE WHICH THIS COULD HELP REDUCE THE GROWTH OF BACTERIA.

0206345007

THE CHILD WILL DESCRIBE THAT ANTISEPTICS REDUCE THE GROWTH OF BACTERIA

0206345008

DEMONSTRATE PURIFYING WATER WITH CHEMICALS BY OBSERVING MICROORGANISMS BLEACH TO THE SLIDE, KILLING THE ORGANISMS.

0206345009

IDENTIFY SOURCES OF INFORMATION TO ANSWER FOUR QUESTIONS ABOUT KEEPING

0206345010

GIVEN SENTENCE DESCRIBING SOME ACTIVITIES OF A MICROORGANISM HARMFUL TO MAN.

0206345011

KNOW THAT THE BODY, BY REFLEX ACTS, EXPELS BACTERIA AND OTHER IRRITANTS

MIX STARCH IN TWO TUBES, ADD DIASTASE TO ONE, TEST BOTH WITH BENEDICT'S SOLUTION.

IA IN STOMACH-USING FOOD- GELATIN. ADD TEN DROPS OF WEAK HYDROCHLORIC ACID TO  
NE GROWTH.

ETE SUBSTANCES THAT PROVIDE AN ENVIRONMENT UNFAVORABLE TO BACTERIA.

EPITHELIAL CELLS THAT LINE THE BODY CAVITIES.

THE ENVIRONMENT OF CERTAIN TYPES OF MICROORGANISMS, MAKING IT UNFAVORABLE TO THEIR

RONMENT FOR A VIRUS IS. WITHIN THE BODY CELLS.

VE IMMUNITY.

HIS STOMACH CELLS MAKE A JUICE WHICH CONTAINS WEAK HYDROCHLORIC ACID, AND THAT  
GROWTH OF BACTERIA.

ANTISEPTICS REDUCE THE GROWTH OF BACTERIA.

WITH CHEMICALS BY OBSERVING MICROORGANISMS WITH A MICROSCOPE, WHILE ADDING CHLORINE  
B THE ORGANISMS.

TION TO ANSWER FOUR QUESTIONS ABOUT KEEPING WATER AND FOOD FREE FROM BACTERIA.

ONE ACTIVITIES OF A MICROORGANISM, TELL WHETHER ACTIVITIES ARE HELPFUL OR

EX ACTS, EXPELS BACTERIA AND OTHER IRRITANTS.

- 0206345012 KNOW THAT THE WHITE BLOOD CELLS ARE ONE OF THE BODY'S DEFENSES AG
- 0206345013 NAME BODY'S LINES OF DEFENSE WHICH HELP IN RESISTING AND/OR COMB
- 0206345014 FIND THAT MOST GERMS DO NOT GROW WHEN AN ANTISEPTIC IS USED.
- 0206345015 DEMONSTRATE ANTISEPTICS USING FOOD-GELATIN. ADD DROPS OF DIFFERENT A  
WATER TO ONE AS A CONTROL, EXPOSED DISHES AND DETERMINE GROWTH.
- 0206345016 KNOW THAT SOME DISEASES CAUSE THE BODY TO BUILD IMMUNITY.
- 0206345017 TELL DIFFERENCE BETWEEN STRUCTURES AND FUNCTIONS OF FOUR GENERAL GRO  
FUNGUS, BACTERIA AND PROTOZOA.
- 0206345018 GIVEN EXAMPLES OF COMMON (HOUSEHOLD OR PROFESSIONAL) MEDICAL PRA  
ANTIBIOTICS ARE BEING USED TO COMBAT INFECTIOUS BACTERIA.
- 0206345019 DESCRIBE HOW WATER AND FOOD ARE KEPT FREE FROM BACTERIA.
- 0206345020 WHEN GIVEN LIST OF SCIENTISTS (LOUIS PASTEUR, EDWARD JENNER, JOSEPH  
ROBERT KOCH) AND THEIR SCIENTIFIC DISCOVERIES, MATCH EACH SCIENT
- 0206345021 TELL DIFFERENCE BETWEEN DEFINITIONS OF FOLLOWING TYPES OF DISEASES
- 0206345022 GIVEN DESCRIPTION OF A PARTICULAR DISEASE AND THE WAY IT IS CONTRACT  
NONCOMMUNICABLE.
- 0206345023 IDENTIFY WAYS IN WHICH SPECIFIC DISEASE CAUSING ORGANISMS E  
ENTRY WITH AIR AND THROUGH SKIN).
- 0206345024 IDENTIFY THE MOST EFFECTIVE METHODS USED TO PREVENT THE SPREAD OF D

ONE OF THE BODY'S DEFENSES AGAINST INFECTION.

HELP IN RESISTING AND/OR COMBATING DISEASE-CAUSING MICROORGANISMS.

WHEN AN ANTISEPTIC IS USED.

-GELATIN, ADD DROPS OF DIFFERENT ANTISEPTICS TO DIFFERENT DISHES, AND BOILED DISHES AND DETERMINE GROWTH.

BODY TO BUILD IMMUNITY.

AND FUNCTIONS OF FOUR GENERAL GROUPS OF DISEASE-CAUSING MICROORGANISMS, VIRUS,

OR PROFESSIONAL  
AT INFECTION

MEDICAL PRACTICES, TELL WHETHER CHEMICALS, HEAT, OR BACTERIA.

PT FREE FROM BACTERIA.

IS PASTEUR, EDWARD  
DISCOVERIES, MATCH

JENNER, JOSEPH LISTER, JONAS SALK, ALEXANDER FLEMING,  
EACH SCIENTIST WITH HIS DISCOVERY.

S OF FOLLOWING TYPES OF DISEASES: ORGANIC, ALLERGIC, INFECTIOUS, DEFICIENCY.

DISEASE AND THE WAY IT IS CONTRACTED, CLASSIFY DISEASE AS COMMUNICABLE OR

SEASE CAUSING

ORGANISMS ENTER THE BODY (ENTRY WITH WATER, MILK, FOOD;

S USED TO PREVENT THE SPREAD OF DISEASE.

0206370

HUMAN BODY (HEALTH CONDITIONS)

0206370001

FROM LIST OF STATEMENTS, IDENTIFY THOSE WHICH DESCRIBE  
STORY ABOUT HEALTH PROBLEMS IN UNDERDEVELOPED NATION.

0206375

HUMAN BODY (HEALTH AND SAFETY)

0206375001

LIST SEVEN EXAMPLES OF GOOD HEALTH AND SAFETY  
RESPONSIBLE FOR EACH ITEM LISTED.

0206390

HUMAN BODY (NERVOUS)

0206390001

IDENTIFY THE LOCATIONS AND FUNCTIONS OF MAJOR PARTS OF  
MEDULLA) AND SPINAL CORD.

0206405

HUMAN BODY (REFLEX)

0206405001

DEMONSTRATE A REFLEX ACTION BY HOLDING CELLOPHANE IN  
A BALL OF PAPER GENTLY AGAINST IT.

0206405002

DEMONSTRATE A SIMPLE REFLEX, BY SITTING WITH LEGS  
BELOW THE KNEE WITH THE EDGE OF THE PALM.

0206415

HUMAN BODY (SKELETAL)

0206415001

IN DIAGRAM OF HUMAN SKELETON, LOCATE SKULL, RIB CAGE,  
PHALANXES.

0206415002

GIVEN DIAGRAM OF SKELETON, LOCATE FOUR KINDS OF JOINTS.

0206420

HUMAN BODY (SKIN, HAIR, TEETH, NAILS)

0206420001

INVESTIGATE THE PROTECTIVE FUNCTIONS OF THE EPITHELIUM.

NS)

IDENTIFY THOSE WHICH DESCRIBE  
IN UNDERDEVELOPED NATION.

HEALTH CONDITIONS IN AN UNDERDEVELOPED NATION. TELL A

TY)

HEALTH AND SAFETY  
LISTED.

PRECAUTIONS AND EXPLAIN WHY YOU SHOULD OR SHOULD NOT BE

FUNCTIONS OF MAJOR PARTS OF CENTRAL NERVOUS SYSTEM. BRAIN (CEREBELLUM, CEREBRUM,

BY HOLDING CELLOPHANE IN  
IN IT.

FRONT OF HIS EYES AND ALLOWING ANOTHER STUDENT TO THROW

X, BY SITTING WITH LEGS  
OF THE PALM.

HANGING LOOSELY, ALLOWING ANOTHER CHILD TO TAP HIM JUST

ON, LOCATE SKULL, RIB CAGE, BACKBONE, PELVIS, FEMUR, TIBIA, FIBULA, RADIUS, ULNA,

LOCATE FOUR KINDS OF JOINTS. HINGE, BALL-AND-SOCKET, IMMOVABLE, AND PIVOT JOINTS.

ETH, NAILS)

FUNCTIONS OF THE EPITHELIAL CELLS THAT COVER OUTER BODY SURFACES.

0206425

HUMAN BODY (SYSTEMS)

0206425001

MATCH SYSTEMS OF HUMAN BODY (DIGESTIVE, CIRCULATORY, SKELETAL, MUSCULAR, AND SKIN) WITH IMPORTANT GENERAL

RES  
FUNG

0206440

HUMAN BODY (WATER)

0206440001

KNOW THAT BACTERIA MAY BE CHEMICALLY REMOVED FROM WATER TO M

0206440002

KNOW THAT MANY HARMFUL BACTERIA AND UNDESIRABLE SOLIDS ARE

0206445

INSECTS

0206445001

DEMONSTRATE COLLECTION OF FRUIT FLIES IN WARM SEASON. COTTON OR CLOTH.

ATTR

0206445002

DESCRIBE DIFFERENT CHARACTERISTICS OF FRUIT FLIES. USE MAGN

0206450

INTERDEPENDENCE

0206450001

KNOW THAT LIVING THINGS ARE INTERDEPENDENT.

0206450002

KNOW THAT LIVING THINGS ARE INTERDEPENDENT WITH ONE

ANOT

0206450003

KNOW THAT IN ATTEMPTS TO UNDERSTAND THE WORLD IN WHICH THAT LIVING THINGS ARE INTERDEPENDENT WITH ONE ANOTHER

HE L  
AND

0206455

LIGHT

0206455001

RECOGNIZE WHICH ONE OF THE THREE MOST COMMON THEORIES THE WAY LIGHT TRAVELS.

ABOU

DIGESTIVE, CIRCULATORY,  
WITH IMPORTANT GENERAL

RESPIRATORY, NERVOUS, REPRODUCTIVE, GLAND, EXCRETORY,  
FUNCTIONS OF EACH.

CHEMICALLY REMOVED FROM WATER TO MAKE IT SUITABLE FOR DRINKING.

RIA AND UNDESIRABLE SOLIDS ARE REMOVED FROM WATER BY FILTRATION.

BIT FLIES IN WARM SEASON. ATTRACT WITH RAW OR COOKED FRUIT IN JAR. CLOSE JAR WITH

ISTICS OF FRUIT FLIES. USE MAGNIFYING GLASS.

INTERDEPENDENT.

INTERDEPENDENT WITH ONE

ANOTHER AND WITH THEIR ENVIRONMENT.

UNDERSTAND THE WORLD IN WHICH  
DEPENDENT WITH ONE ANOTHER

HE LIVES, MAN HAS DEVELOPED THE LARGE CONCEPTUAL SCHEME  
AND THE ENVIRONMENT.

THREE MOST COMMON THEORIES

ABOUT THE NATURE OF LIGHT IS DEMONSTRATED IN EXAMPLES OF

0206455002 TELL HOW LIGHT AND THE PARTS OF YOUR EYE INTERACT TO PRO

0206455003 WHEN YOU ARE GIVEN INFORMATION ABOUT THE ROUGHNESS OR SMO  
REFLECT LIGHT IN A SCATTERED WAY AND WHICH WILL REFLECT IT

0206455004 RECOGNIZE WHETHER SUBSTANCES OR OBJECTS WITH DIFFERENT SUR  
LIGHT WHICH FALLS ON THEM OR WILL ABSORB IT.

0206455005 TELL WHETHER OBJECTS ARE TRANSPARENT, TRANSLUCENT, OR OPA

0206455006 PREDICT ANGLE AT WHICH LIGHT WILL BE REFLECTED FROM A SUR  
THAT SURFACE.

0206455007 RECOGNIZE DIAGRAMS THAT CORRECTLY ILLUSTRATE HOW WHITE LIG  
CONCAVE AND CONVEX LENSES, (2) THROUGH PRISMS, AND (3) THRO

0206455008 PREDICT THE KINDS OF IMAGES THAT WILL BE MADE BY CONVEX LENS

0206460 MACHINES

0206460001 KNOW THAT THE AMOUNT OF ENERGY GOTTEN OUT OF A MACHINE DOES

0206460002 KNOW THAT MACHINES MAY MULTIPLY FORCE, INCREASE SPEED, OR

0206460003 VERIFY THE CONCEPT BY INVESTIGATING A DIFFERENT MACHINE.

0206465 MACHINES (COMPOUND)

0206465001 KNOW THAT MOST COMPOUND MACHINES ARE MODIFICATIONS OR COM

0206465002 KNOW THAT COMPOUND MACHINES MULTIPLY THE FORCES OF THE SIM

OF YOUR EYE INTERACT TO PRODUCE AN IMAGE.

ON ABOUT THE ROUGHNESS OR SMOOTHNESS OF SOME OBJECTS, RECOGNIZE WHICH ONES WILL  
WAY AND WHICH WILL REFLECT IT IN A REGULAR WAY.

OR OBJECTS WITH DIFFERENT SURFACE TEXTURES AND COLORS WILL REFLECT MOST OF THE  
WILL ABSORB IT.

TRANSPARENT, TRANSLUCENT, OR OPAQUE.

WILL BE REFLECTED FROM A SURFACE WHEN GIVEN THE ANGLE AT WHICH THAT LIGHT STRIKES

ECTLY ILLUSTRATE HOW WHITE LIGHT IS BENT (REFRACTED) AS IT PASSES (1) THROUGH  
(2) THROUGH PRISMS, AND (3) THROUGH WATER.

THAT WILL BE MADE BY CONVEX LENSES AND THE TYPES MADE BY CONCAVE LENSES.

GY GOTTEN OUT OF A MACHINE DOES NOT EXCEED THE ENERGY PUT INTO IT.

PLY FORCE, INCREASE SPEED, OR CHANGE DIRECTION.

FIGATING A DIFFERENT MACHINE.

MACHINES ARE MODIFICATIONS OR COMBINATIONS OF A FEW SIMPLE MACHINES.

LY THE FORCES OF THE SIMPLE MACHINES OF WHICH THEY

0206465003 KNOW THAT BOTH PHYSICAL AND CHEMICAL CHANGES OCCUR IN STEAM

0206465004 KNOW THAT INTERNAL COMBUSTION ENGINES TRANSFER THE FORCE

0206470 MACHINES (SIMPLE)

0206470001 KNOW THAT A SIMPLE MACHINE MULTIPLIES EFFORT BUT DOES NOT INC

0206470002 KNOW THAT A SCREW IS A WINDING INCLINED PLANE,

0206470003 DEMONSTRATE IT IS EASIER TURNING A SCREW INTO WOOD THAN PUSHING  
ATTEMPTING TO PUSH IT THE REST OF THE WAY.

0206470004 CONSTRUCT A WINDING INCLINED PLANE. CUT INCLINED PLANE 12 INCH  
WILL RISE 1/2 INCH PER TURN AND TAKE 11 TURNS.

0206470005 DESCRIBE THAT TURNING THE SCREW INTO WOOD IS SIMILAR TO USING A

0206470006 KNOW THAT WEDGES ARE MOVABLE INCLINED PLANES FOR OVERCOM

0206470007 DEMONSTRATE AN INCLINED PLANE MAKES A JOB EASIER BY PULLING  
BOARD, CAUSING THE AMOUNT TO READ LESS THAN BY LIFTING THE SKA

0206470008 KNOW THAT THE EFFORT NEEDED TO RAISE A WEIGHT A GIVEN DISTANC  
IS INCREASED.

0206470009 KNOW THAT A LEVER IS A SIMPLE MACHINE THAT CONCENTRATES THE EFF  
LEVER USUALLY MULTIPLIES FORCE.

0206470010 KNOW THAT THE EFFORT NEEDED TO RAISE A WEIGHT WITH A LEVER  
THE EFFORT FROM THE FULCRUM.

0206470011 KNOW THAT MOVING THE FULCRUM IN RELATION TO LOAD AND EFFORT  
APPLIED TO LIFT A LOAD.

CHEMICAL CHANGES OCCUR IN STEAM AND INTERNAL COMBUSTION ENGINES.

ENGINES TRANSFER THE FORCE OF KINETIC ENERGY DIRECTLY TO MACHINES.

AMPLIFIES EFFORT BUT DOES NOT INCREASE WORK.

INCLINED PLANE.

DRIVING A SCREW INTO WOOD THAN PUSHING IT BY PARTIALLY TURNING IT INTO WOOD THEN  
OF THE WAY.

INCLINED PLANE. CUT INCLINED PLANE 12 INCHES BY 6 INCHES AND WIND IT AROUND A PENCIL. IT  
TO TAKE 11 TURNS.

DRIVING INTO WOOD IS SIMILAR TO USING AN INCLINED PLANE USING LESS EFFORT FORCE.

INCLINED PLANES FOR OVERCOMING GREAT RESISTANCES.

MAKES A JOB EASIER BY PULLING A SKATE WITH A SPRING BALANCE UP A SLANTED  
REQUIRES LESS THAN BY LIFTING THE SKATE ALONE.

TO RAISE A WEIGHT A GIVEN DISTANCE DECREASES AS THE LENGTH OF AN INCLINED PLANE

A MACHINE THAT CONCENTRATES THE EFFORT FORCE AND THE LOAD, EACH AT ONE POINT, A

TO RAISE A WEIGHT WITH A LEVER DEPENDS ON THE RELATIVE DISTANCES OF THE LOAD AND

IN RELATION TO LOAD AND EFFORT INCREASES OR DECREASES THE EFFORT THAT MUST BE

- 0206470012 KNOW THAT THE LONGER THE EFFORT ARM, THE MORE A FORCE IS MULTIPLIED
- 0206470013 DEMONSTRATE LOCATION OF FULCRUM AFFECTING EFFORT FORCE. USING A RULER CLOSE TO EFFORT, CAUSING GREATER EFFORT FORCE AS FULCRUM IS CLOSE TO LOAD.
- 0206470014 DEMONSTRATE A LEVER MAKES A JOB EASIER BY USING A RULER TO HOLD DOWN THE OTHER END CAUSING IT TO READ LESS THAN WITH THE BALANCE SCALE.
- 0206470015 DESCRIBE THAT THE LEVER IS A FORCE MULTIPLIER SINCE IT ALLOWS A SMALL EFFORT TO MOVE A LARGE LOAD.
- 0206470016 KNOW THAT A FIXED PULLEY CHANGES THE DIRECTION OF A FORCE; IT DOES NOT CHANGE THE MAGNITUDE OF THE FORCE.
- 0206470017 KNOW THAT A FIXED PULLEY CHANGES THE DIRECTION OF THE EFFORT FORCE. IT DOES NOT CHANGE THE MAGNITUDE OF THE FORCE.
- 0206470018 DEMONSTRATE A FIXED PULLEY CHANGES DIRECTION OF FORCE REQUIRED TO MOVE A LOAD. COMPARING DIRECTION WITH AND WITHOUT PULLEY.
- 0206470019 DEMONSTRATE A MOVABLE PULLEY REDUCES EFFORT IN MOVING A LOAD. COMPARING A FIXED AND MOVABLE PULLEY CAUSING LESS EFFORT WITH A MOVABLE PULLEY.
- 0206470020 KNOW THAT PULLEY SYSTEMS BOTH CHANGE THE DIRECTION OF A FORCE AND MULTIPLY THE EFFORT FORCE.
- 0206470021 TEST UNDERSTANDING OF PULLEYS BY CONSIDERING SEVERAL SITUATIONS.
- 0206470022 KNOW THAT A BLOCK AND TACKLE PULLEY SYSTEM MULTIPLIES THE FORCE APPLIED.
- 0206470023 DEMONSTRATE A BLOCK AND TACKLE CAN INCREASE THE TIMES A FORCE IS APPLIED. USING ONE AND TWO MOVABLE PULLEYS PROVING FORCE IS INCREASED.
- 0206470024 DESCRIBE THE WAY THAT EFFORT FORCE IS MULTIPLIED IN A BLOCK AND TACKLE SYSTEM. SUPPORT THE MOVABLE PULLEY BLOCK.
- 0206470025 DEMONSTRATE USING TWO DOUBLE BLOCKS IN A BLOCK AND TACKLE SYSTEM. COMPARE EFFORT.

SHORT ARM; THE MORE A FORCE IS MULTIPLIED.

FULCRUM AFFECTING EFFORT FORCE USING A SPRING BALANCE TO MEASURE FORCE WHEN FULCRUM IS  
 CLOSER TO LOAD.  
 LARGER EFFORT FORCE AS FULCRUM IS CLOSER TO LOAD.

IT IS EASIER BY USING A RULER TO HOLD A BOOK WHILE A SPRING BALANCE IS USED TO PULL  
 IT TO READ LESS THAN WITH THE BALANCE ALONE.

FORCE MULTIPLIER SINCE IT ALLOWS FOR LESS FORCE NEEDED TO LIFT AN OBJECT.

CHANGES THE DIRECTION OF A FORCE; IT DOES NOT MULTIPLY THE FORCE.

CHANGES THE DIRECTION OF THE EFFORT FORCE; A MOVABLE PULLEY DOUBLES THE FORCE.

CHANGES DIRECTION OF FORCE REQUIRED TO LIFT A LOAD, BY LIFTING A BRICK USING A  
 PULLEY.  
 WITH AND WITHOUT PULLEY.

REDUCES EFFORT IN COMPARISON WITH A FIXED PULLEY BY LIFTING A BRICK USING  
 CAUSING LESS EFFORT WITH MOVABLE PULLEY.

IT CHANGES THE DIRECTION OF A FORCE AND MULTIPLY IT.

WAYS BY CONSIDERING SEVERAL SITUATIONS IN WHICH THEY MAY BE USED.

A PULLEY SYSTEM MULTIPLIES THE FORCE BY THE NUMBER OF ROPES THAT SUPPORT THE LOAD.

A BLOCK CAN INCREASE THE TIMES A FORCE IS MULTIPLIED - WEIGH LOAD, LIFT WITH BLOCK AND  
 MULTIPLE PULLEYS PROVING FORCE IS INCREASED.

THE EFFORT FORCE IS MULTIPLIED IS INCREASED WITH AN INCREASE IN THE NUMBER OF STRINGS THAT  
 BLOCK.

USE MULTIPLE BLOCKS IN A BLOCK AND TACKLE MULTIPLY FORCE MORE THAN TWO SINGLE BLOCKS. USE  
 IT.

- 0206470026 KNOW THAT ONE USE OF THE WHEEL AND AXLE IS TO INCREASE SPEED.
- 0206470027 KNOW THAT A WHEEL AND AXLE MULTIPLIES FORCE WHEN IT IS APPLIED TO THE AXLE.
- 0206470028 KNOW THAT GEARS MULTIPLY FORCE OR INCREASE SPEED AS THE WHEEL AND AXLE FORCE.
- 0206470029 DEMONSTRATE FRICTION RESISTS MOTION BY PULLING WOOD ACROSS THREE OILED SURFACE, COMPARING WITH SPRING BALANCE WHICH REQUIRES GREATER FORCE.
- 0206470030 DEMONSTRATE WORK LIFTING A SKATE TO THE TOP OF A PILE OF BOOKS IS EQUAL TO EQUAL HEIGHT BY READING A SPRING BALANCE AND APPLYING THE WORK RULE.
- 0206470031 MATCH EXAMPLES OF INCLINED PLANE, FIXED PULLEY, WHEEL AND AXLE, LEVER. THEY MAKE WORK EASIER.
- 0206470032 WHEN GIVEN DRAWINGS OF LEVERS, RECOGNIZE THE FULCRUM, THE LOAD, AND THE EFFORT.
- 0206470033 DEMONSTRATE DIFFERENCE BETWEEN VALUE OF A FIXED PULLEY AND VALUE OF A Movable Pulley.
- 0206470034 DEMONSTRATE RELATIONSHIPS BETWEEN EFFORT APPLIED AND AMOUNT OF WORK DONE BY SIMPLE MACHINES.
- 0206480 MAGNETS
- 0206480001 DEMONSTRATE DIFFERENCE BETWEEN MAGNETIC MATERIALS WHICH ARE PERMANENT AND SOFT.
- 0206480002 GIVEN DIAGRAM OR DRAWING OF A MAGNETIC FIELD, LOCATE THE STRONGEST AND WEAKEST PART OF THE FIELD.
- 0206480003 TELL THE DIFFERENCE BETWEEN THE NORTH GEOGRAPHIC POLE AND THE NORTH MAGNETIC POLE.

AND AXLE IS TO INCREASE SPEED.

PLIES FORCE WHEN IT IS APPLIED TO THE WHEEL, AND INCREASES SPEED WHEN IT IS

R INCREASE SPEED AS THE WHEEL AND AXLE DOES, AND CHANGE THE DIRECTION OF THE

ION BY PULLING WOOD ACROSS THREE DIFFERENT SURFACES-TABLE TOP, SAND PAPER,  
RING BALANCE WHICH REQUIRES GREATEST EFFORT.

TO THE TOP OF A PILE OF BOOKS IS EQUAL TO WORK PULLING IT UP AN INCLINED PLANE  
ING BALANCE AND APPLYING THE WORK RULE.

, FIXED PULLEY, WHEEL AND AXLE, LEVEL, WEDGE, AND SCREW WITH WAYS IN WHICH

COGNIZE THE FULCRUM, THE LOAD, AND THE BEST POINT TO APPLY EFFORT.

VALUE OF A FIXED PULLEY AND VALUE OF A BLOCK AND TACKLE AS SIMPLE MACHINES.

, EFFORT APPLIED AND AMOUNT OF WORK DONE IN EXPERIMENTAL SITUATIONS USING

MAGNETIC MATERIALS WHICH ARE PERMANENT AND THOSE WHICH ARE TEMPORARY,

MAGNETIC FIELD, LOCATE THE STRONGEST AND WEAKEST LINES OF FORCE IN THE MAGNETIC

NORTH GEOGRAPHIC POLE AND THE NORTH MAGNETIC POLE,

0206490 METALS

0206490001 KNOW THAT THE CONCEPTS OF THE BEHAVIOR OF MATTER HAD TO BE UNDER

0206490002 KNOW THAT METALS CAN BE SEPARATED FROM THEIR COMPOUNDS; THEY CAN  
PROPERTIES.

0206490003 KNOW THAT HEAT IS A SOURCE OF ENERGY FOR EXTRACTING COPPER F

0206490004 KNOW THAT HEAT IS A SOURCE OF ENERGY FOR EXTRACTING IRON FROM ITS

0206490005 KNOW THAT METALS WITH NEW PROPERTIES CAN BE OBTAINED IF TWO OR M  
MELTED TOGETHER AND COOLED.

0206490006 KNOW THAT ALLOYS PROVIDE US WITH SUBSTANCES WITH ADVANTAG

0206490007 KNOW THAT ALUMINUM HAS MANY USES.

0206510 PLANTS (ADAPTATION)

0206510001 DESCRIBE THAT PLANTS FROM POTATO HAD SAME HEREDITY BUT DID NOT

0206515 PLANTS (BACTERIA)

0206515001 KNOW THAT BACTERIA CAN BE CLASSIFIED, OR GROUPED BY THEIR ST

0206515002 INFER, FROM INVESTIGATION, THAT HEAT AND ABSENCE OF LIGHT IN  
MOST BACTERIA.

0206515003 APPLY UNDERSTANDING OF THE NEEDS OF BACTERIA TO METHODS OF FOOD

0206515004 KNOW THAT BACTERIA CAN BE CLASSIFIED AS HELPFUL OR HARMFUL

THE BEHAVIOR OF MATTER HAD TO BE UNDERSTOOD BEFORE METALS COULD BE USED WIDELY.

SEPARATED FROM THEIR COMPOUNDS; THEY CAN BE COMBINED TO OBTAIN NEW COMPOUNDS HAVING NEW  
OF ENERGY FOR EXTRACTING COPPER FROM ITS ORES.

OF ENERGY FOR EXTRACTING IRON FROM ITS ORE.

PROPERTIES CAN BE OBTAINED IF TWO OR MORE ELEMENTS, AT LEAST ONE OF THEM A METAL, ARE  
WITH SUBSTANCES WITH ADVANTAGEOUS PROPERTIES.  
USES.

POTATO HAD SAME HEREDITY BUT DID NOT DEVELOP ALIKE DUE TO ENVIRONMENT.

CLASSIFIED, OR GROUPED BY THEIR STRUCTURE.

THAT HEAT AND ABSENCE OF LIGHT IN THE ENVIRONMENT ARE ESSENTIAL FOR GROWTH OF  
NEEDS OF BACTERIA TO METHODS OF FOOD PRESERVATION.

CLASSIFIED AS HELPFUL OR HARMFUL TO MAN.

0206515005	KNOW THAT THE GROWTH OF LARGE NUMBERS OF BACTERIA OR HEALTH.	TOXICITY OF
0206515006	KNOW THAT BACTERIA OBTAIN FOOD FROM CHANGING COMPLEX	SUBSTANCES
0206515007	CHILD WILL DEMONSTRATE GROWTH OF BACTERIA USING P-TRI REFRIGERATOR AND OTHER IN A WARM DARK PLACE, THEN	DISHES, EXP COMPARE GRO
0206515008	DEMONSTRATE CULTURE OF MICROORGANISMS, BY ADDING HARD- FOR SEVERAL DAYS UNTIL CULTURE IS SWARMING WITH	BOILED EGG BACTERIA.
0206515009	GIVEN DRAWINGS OR DESCRIPTIONS OF THREE TYPES OF CORRECTLY.	BACTERIA (C
0206520	PLANTS (BACTERIA AND MOLD)	
0206520001	KNOW THAT BACTERIA AND MOLD ARE CLASSIFIED AS PLANTS BY	THEIR STRUC
0206520002	KNOW THAT BACTERIA AND MOLDS CHEMICALLY BREAK DOWN THROUGH A MEMBRANE.	COMPLEX FOO
0206545	PLANTS (GROWTH)	
0206545001	DEMONSTRATE EFFECT OF ENVIRONMENT ON LIVING THINGS OF FOOD, WATER, LIGHT, AND ARRANGE IN FOUR DIFFERENT	SAME HEREDI COMBINATION
0206550	PLANTS (HYBRIDS)	
0206550001	DEMONSTRATE CROSS-POLLINATION OF PETUNIAS. REMOVE TRANSFER POLLEN TO IT FROM RED FLOWER. PRODUCE PINK-	STAMENS FRO WHITE FLOWE

NUMBERS OF BACTERIA OR

TOXICITY OF SUBSTANCES FORMED MAY BE DANGEROUS TO

FROM CHANGING COMPLEX

SUBSTANCES INTO SIMPLER ONES.

OF BACTERIA USING PETRI  
DISHES, EXPOSE THE PREPARED DISHES, PLACING ONE IN  
DARK PLACE, THEN COMPARE GROWTH.

BACTERIA, BY ADDING HARD-  
BOILED EGG YOLK TO JAR OF POND WATER, KEEPING IT WARM  
IS SWARMING WITH BACTERIA.

OF THREE TYPES OF

BACTERIA (COCCUS, BACILLUS, AND SPIRILLUM), LABEL

CLASSIFIED AS PLANTS BY THEIR STRUCTURE.

CHEMICALLY BREAK DOWN

COMPLEX FOODS INTO SIMPLE SUBSTANCES THAT CAN PASS

MENT ON LIVING THINGS OF  
E IN FOUR DIFFERENT

SAME HEREDITY. GROW PLANTS FROM POTATO EYES; CONTROL  
COMBINATIONS.

OF PETUNIAS. REMOVE  
FLOWER. PRODUCE PINK-

STAMENS FROM COVERED WHITE BUD. LET FLOWER MATURE;  
WHITE FLOWER FROM IT.

0206555 PLANTS (MOLDS)

0206555001 DEMONSTRATE GROWTH OF MOLD. USE TWO PIECES OF DRY BREAD, PLACE; MOLD WILL GROW ON MOIST PIECE.

0206555002 THE CHILD WILL DESCRIBE THE MOLD WHICH GROWS BY OBSERVING OF THREADS, BLACK BALL AT ONE END, AND ROOT-LIKE PARTS.

0206565 PLANTS (NONGREEN)

0206565001 KNOW THAT NONGREEN PLANTS ARE INTERDEPENDENT WITH OTHER ORGANISMS UNDER CONDITIONS FAVORABLE TO SURVIVAL.

0206565002 KNOW THAT BACTERIA, PLANTS WITHOUT CHLOROPHYLL, DEPEND ON OTHER ORGANISMS FOR SURVIVAL.

0206565003 KNOW NONGREEN PLANTS GROW AND REPRODUCE RAPIDLY IN A FAVORABLE ENVIRONMENT.

0206585 PLANTS (TREES)

0206585001 DEMONSTRATE TREE GRAFTING IN EARLY SPRING. PREPARE AND GRAFT 2 CLOTH AND WAX.

0206610 REPRODUCTION

0206610001 KNOW THAT SOME PLANTS CAN REPRODUCE NEW PLANTS FROM A PART OF AN EXISTING PLANT.

0206610002 KNOW THAT AN EMBRYO CONTAINS THE BEGINNING OF A NEW ORGANISM.

0206620 SCIENTIFIC METHOD

0206620001 KNOW THAT ACHIEVEMENT OF A GOAL INVOLVES INSIGHT AND REQUIRES PERSISTENCE.

USE TWO PIECES OF DRY  
MOIST PIECE.

BREAD, MOISTEN ONE, PLACE EACH IN A SEALED JAR IN DARK

THE MOLD WHICH GROWS BY  
ONE END, AND ROOT-LIKE PARTS.

OBSERVING WITH A MICROSCOPE AND NOTING CHARACTERISTICS

ARE INTERDEPENDENT WITH OTHER ORGANISMS FOR THEIR FOOD AND WITH THEIR ENVIRONMENT FOR  
SURVIVAL.

S WITHOUT CHLOROPHYLL, DEPEND ON OTHER ORGANISMS FOR THEIR FOOD.

AND REPRODUCE RAPIDLY IN A FAVORABLE ENVIRONMENT.

IN EARLY SPRING. PREPARE AND GRAFT 2 RELATED FRUIT TREE BRANCHES, COVER GRAFT WITH

REPRODUCE NEW PLANTS FROM A PART OF THEMSELVES.

AINS THE BEGINNING OF A NEW ORGANISM.

INVOLVES INSIGHT AND REQUIRES MAKING OF DEFINITE PLANS.

0206620002	KNOW THAT DISCOVERY OF NEW PROCESSES AND PRODUCTS EARLIER TECHNOLOGICAL ADVANCES.	DEPENDS ON
0206620003	KNOW THAT INVENTION OF NEW MATERIALS DEPENDS ON	UNDERSTAND
0206620004	KNOW THAT A CONCEPT IS ARRIVED AT ONLY AFTER CAREFUL AND EXTENSIVE	
0206620005	RECOGNIZE THAT THE HABIT OF SEEKING RELATIONSHIPS	BETWEEN CO
0206620006	GAIN FURTHER INSIGHT INTO REFINING PLANS FOR	INVESTIGAT
0206620007	KNOW THAT A SCIENTIST IN HIS INVESTIGATIONS USES THE	PROCESSES
0206620008	KNOW THAT BY STUDYING AND APPLYING CONCEPTS, SCIENTISTS	HAVE FOUND
0206620009	KNOW THAT CONCEPTS ARE A BASE FOR DRAWING INFERENCES.	
0206620010	KNOW THAT SEARCHING FOR HIDDEN LIKENESSES LEADS TO	CONCEPTS.
0206620011	KNOW THAT TECHNOLOGISTS APPLY CONCEPTS.	
0206620012	DEMONSTRATE THE TESTING OF HYPOTHESIS, INDICATING THE RESULTS.	WHETHER OR

0206635      SOLAR SYSTEM (STARS)

0206635001      KNOW THAT NUCLEAR REACTIONS PRODUCE THE RADIANT ENERGY      OF STARS,

0206635002      KNOW THAT NUCLEAR REACTIONS ARE THE SOURCE OF THE SUN'S ENERGY.

S AND PRODUCTS DEPENDS ON UNDERSTANDING CONCEPTS IN SCIENCE, AS WELL AS

S DEPENDS ON UNDERSTANDING BASIC CONCEPTS OF SCIENCE.

LY AFTER CAREFUL AND EXTENSIVE INVESTIGATIONS AND EXPERIMENTS.

RELATIONSHIPS BETWEEN CONCEPTS CAN LEAD TO NEW DISCOVERIES.

PLANS FOR INVESTIGATIONS.

IGATIONS USES THE PROCESSES OF LEARNING.

CONCEPTS, SCIENTISTS HAVE FOUND A MEANS FOR CONQUERING MANY DISEASES.

RAWING INFERENCES.

ESSES LEADS TO CONCEPTS.

PTS.

S, INDICATING WHETHER OR NOT HE ACCEPTS HIS OWN HYPOTHESIS, BASED ON

THE RADIANT ENERGY OF STARS, AND CONSEQUENT CHANGE,

ERIC  
SOURCE OF THE SUN'S ENERGY.

0206635003 KNOW THAT ANALYSIS OF LIGHT FROM A STAR HELPS US DETERMINE  
THROUGH THE DOPPLER EFFECT FOR LIGHT.

0206635004 KNOW THAT THE HEAT ENERGY OF A STAR IS A CLUE TO ITS SIZE

0206635005 KNOW THAT THE HEAT, TEMPERATURE, AND SIZE OF A STAR CAN BE DETERMINED

0206635006 KNOW THAT THE TOTAL HEAT AND LIGHT ENERGY OF A STAR IS A FURTHER CLUE

0206635007 KNOW THAT THE MILKY WAY GALAXY IS VAST IN THE NUMBER OF ITS STARS

0206635008 KNOW THAT THE NUMBER OF STARS IS ESTIMATED BY SAMPLING REGIONS

0206635009 KNOW THAT IN ORDER TO ESTIMATE THE TOTAL NUMBER OF STARS IN THE UNIVERSE  
DIMENSIONS; THE LIGHT-YEAR UNIT OF DISTANCE IS CONVENIENT

0206635010 KNOW THAT WE SEE THE SOLAR SYSTEM AND OUR GALAXY AS IT WAS LONG AGO

0206635011 KNOW THAT STARS ARE CONTINUALLY CHANGING.

0206635012 KNOW THAT MOST STARS UNDERGO GRADUAL CHANGE.

0206635013 KNOW THAT SYSTEMS OF STARS MAY HAVE FORMED FROM SUPERNOVA REMAINS

0206635014 KNOW THAT THE POSITION OF THE STARS CHANGES IN A PREDICTABLE MANNER

0206635015 KNOW THAT THE CHANGING POSITIONS OF BODIES IN SPACE CAN BE PREDICTED

FROM A STAR HELPS US DETERMINE ITS DIRECTION TOWARD OR AWAY FROM THE EARTH.  
FOR LIGHT.

OF A STAR IS A CLUE TO ITS SIZE.

ATURE, AND SIZE OF A STAR CAN BE DETERMINED BY ANALYSIS OF ITS LIGHT.

ND LIGHT ENERGY OF A STAR IS A FURTHER CLUE TO ITS SIZE.

LAXY IS VAST IN THE NUMBER OF ITS STARS AND THE DISTANCES BETWEEN THEM.

ARS IS ESTIMATED BY SAMPLING REGIONS OF A GALAXY.

ATE THE TOTAL NUMBER OF STARS IN THE MILKY WAY, WE MUST DETERMINE THE GALAXY'S  
UNIT OF DISTANCE IS CONVENIENT.

SYSTEM AND OUR GALAXY AS IT WAS IN THE PAST.

UALLY CHANGING.

GO GRADUAL CHANGE.

MAY HAVE FORMED FROM SUPE :NOVAS.

THE STARS CHANGES IN A PREDICTABLE AND ORDERLY WAY.

ITIONS OF BODIES IN SPACE CAN BE PLOTTED WITH ACCURACY.

0206640

SOUND

0206640001

KNOW THAT SOUND IS T

ATION OF MOLECULES IN A

WAVELIKE

0206640002

USE MOLECULAR THEORY AND THE WAVE THEORY TO EXPLAIN HOW  
PERSON WHO HEARS IT.

SOUND T

0206640003

TELL WHAT CONDITIONS ARE NEEDED FOR MAKING AND HEARING

SOUNDS.

0206640004

GIVEN EXPERIMENT WHICH PRODUCES DIFFERENT NUMBERS OF  
PER SECOND (FREQUENCY) IS RELATED TO AMOUNT OF FORCE

WAVES,  
REQUIRED

0206640005

GIVEN EXPERIMENT AND DIAGRAM SHOWING RESULTS OF  
(HEIGHT OR DEPTH) OF THE WAVES AND THE FORCE IT TOOK TO

EXPERIME  
MAKE THO

0206640006

DETERMINE THE DISTANCE TRAVELED BY A SOUND THROUGH THE  
FROM ITS SOURCE TO THE HEARER.

AIR GIVE

0206640007

GIVEN LIST OF MATERIALS OR SUBSTANCES THAT TRANSMIT  
THOSE WHICH ARE POOR CONDUCTORS.

SOUND,

0206640008

GIVEN DESCRIPTION OF THE SURFACE OF A MATERIAL, TELL  
ECHO (REFLECT) IT.

WHETHER

0206640009

DESIGN EXPERIMENT WHICH DEMONSTRATES RELATIONSHIP  
AMOUNT OF ENERGY TO VARY THE VOLUME OF SOUND PRODUCED).

BETWEEN

0206640010

RECOGNIZE RELATIVE VOLUME OF A SERIES OF SOUNDS (LOUDEST OR SOFTEST  
OR WHEN GIVEN DATA ABOUT THE AMPLITUDE OF VOLUME.

0206640011

TELL HOW THE PITCH (FREQUENCY) OF A SOUND CAN BE RAISED OR LOWERED  
VIBRATING OBJECT IS CHANGED.

0206665

WEATHER

0206665001

TELL THE DIFFERENCE BETWEEN WEATHER AND CLIMATE. TELL

WHAT ATM

MOLECULES IN A WAVELIKE PATTERN.

THEORY TO EXPLAIN HOW SOUND TRAVELS FROM ITS SOURCE (OR BEGINNING) TO THE

MAKING AND HEARING SOUNDS.

DIFFERENT NUMBERS OF WAVES, DRAW DIAGRAM TO DEMONSTRATE THAT NUMBER OF WAVES  
AND AMOUNT OF FORCE REQUIRED TO MAKE THEM.

THE RESULTS OF EXPERIMENT, RECOGNIZE RELATIONSHIP BETWEEN AMPLITUDE  
THE FORCE IT TOOK TO MAKE THOSE WAVES.

A SOUND THROUGH THE AIR GIVEN THE NUMBER OF SECONDS SOUND TAKES TO TRAVEL

THE MEDIUMS THAT TRANSMIT SOUND, IDENTIFY THOSE WHICH CARRY SOUND WAVES WELL AND

THE EFFECT OF A MATERIAL, TELL WHETHER THE SURFACE WILL TAKE IN SOUND (ABSORB IT), OR

THE RELATIONSHIP BETWEEN EXPENDED ENERGY AND VOLUME OF SOUND. (CHANGE  
OF SOUND PRODUCED).

THE LONDEST OF SOUNDS (LOUDEST OR SOFTEST) WHEN SHOWN GRAPHS PICTURING THEIR AMPLITUDE,  
THE LONDEST OF VOLUME.

HOW SOUND CAN BE RAISED OR LOWERED WHEN THE LENGTH, THICKNESS, OR TENSION OF THE

WIND AND CLIMATE. TELL WHAT ATMOSPHERIC CONDITIONS ARE CHARACTERISTIC OF EACH.

0206670 WEATHER (CLOUDS)

0206670001 IDENTIFY BASIC CLOUD TYPES (CUMULUS, CIRRUS, AND CLOUD FORMATIONS.

0206675 WEATHER (FRONTS)

0206675001 RECOGNIZE THE FOUR KINDS OF WEATHER FRONTS (WARM, COLD, EXAMPLE OF EACH.

0206680 WEATHER (PRECIPITATION)

0206680001 MATCH DIFFERENT FORMS OF PRECIPITATION (RAIN, SLEET,

0206685 WEATHER (PREDICTION)

0206685001 GIVEN INFORMATION ABOUT FACTORS WHICH CAUSE MOVEMENT OF TEMPERATURES AND OTHER FACTORS WHICH CAUSE UNEQUAL

0206685002 PREDICT CHANGES IN THE WEATHER WHEN GIVEN READINGS FROM HYGROMETER).

0206685003 WHEN GIVEN DATA ON A WEATHER MAP, PREDICT THE PARTICULAR

0206685004 MATCH THE TOOLS USED BY METEOROLOGISTS (ELECTRONIC SATELLITES) WITH THEIR FUNCTIONS IN PREDICTING WEATHER.

0206690 WEATHER (RECORDING)

0206690001 GIVEN DESCRIPTION OF A WEATHER CONDITION, IDENTIFY THE THE SPECIFIED CONDITION.

0206690002 CONSTRUCT A POINT GRAPH OR LINE GRAPH FROM THE WEATHER

YPES (CUMULUS, CIRRUS, AND

STRATUS) WHEN GIVEN A DRAWING OR DESCRIPTION OF THESE

DS OF WEATHER FRONTS (WARM, COLD, STATIONARY, AND OCCLUDED) WHEN GIVEN A DESCRIPTION OR

OF PRECIPITATION (RAIN, SLEET, HAIL, SNOW) WITH DESCRIPTION OF HOW EACH IS FORMED.

FACTORS WHICH CAUSE MOVEMENT OF AIR MASSES (ANGLE OF SUN'S RAYS, NIGHT AND DAY, HEATING), PREDICT PROBABLE DIRECTION OF AIR MOVEMENT.

WEATHER WHEN GIVEN READINGS FROM RECORDING INSTRUMENTS (THERMOMETER, BAROMETER, AND

ATHER MAP, PREDICT THE PARTICULAR TYPES OF WEATHER CONDITIONS IN THAT AREA.

METEOROLOGISTS (ELECTRONIC COMPUTERS, RADAR, RADIOSONDE, WEATHER BALLOONS AND FUNCTIONS IN PREDICTING WEATHER.

WEATHER CONDITION, IDENTIFY THE APPROPRIATE RECORDING INSTRUMENT FOR THE MEASUREMENT OF

OF THE GRAPH FROM THE WEATHER FORECAST EACH DAY.

0206695

WEATHER (STORMS)

0206695001

RECOGNIZE DEFINITIONS OF DESTRUCTIVE FORCES OF WEATHER (THUNDERSTORM)  
WHEN GIVEN A DESCRIPTION OR DIAGRAM OF EACH STORM.

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FORCES OF WEATHER (THUNDERSTORM, CYCLONE, TYPHOON, HURRICANE, AND TORNADO)  
EACH STORM.